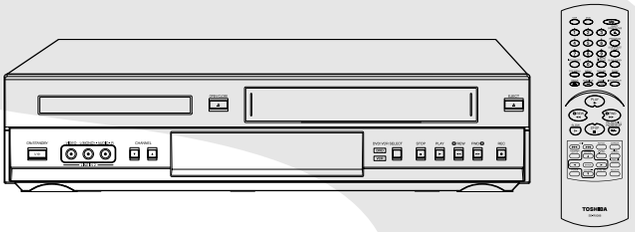
TOSHIBA

FILE NO. 810-200226

SERVICE MANUAL

DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

SD-V290
SD-V390



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SECTION 1

SUMMARY

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TOSHIBA

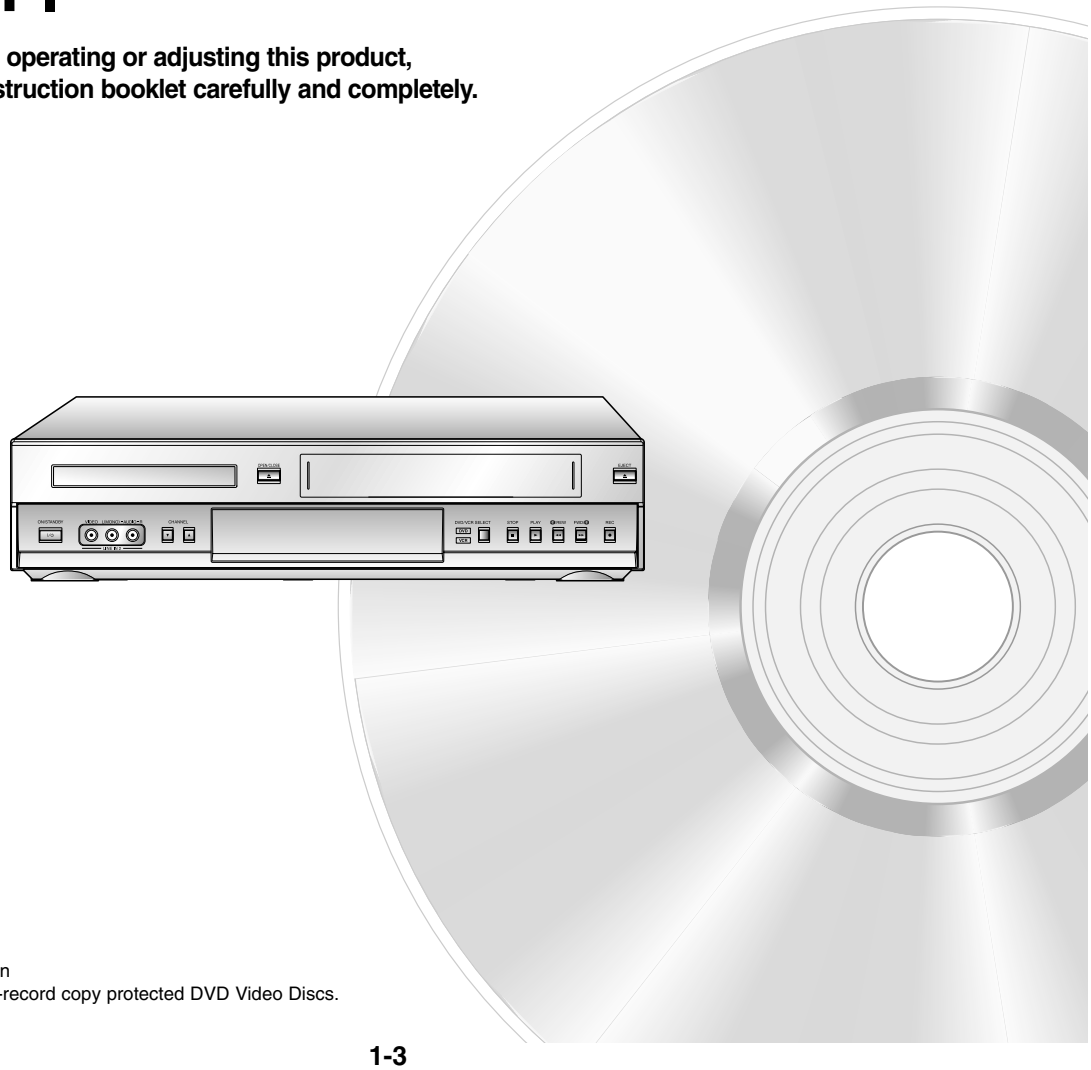
DVD VIDEO PLAYER & VIDEO CASETTE RECORDER

SD-V290-S-TU

OWNER'S MANUAL

VHS Hi-Fi

Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.



©2002 Toshiba Corporation
This device does not tape-record copy protected DVD Video Discs.

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

NOTE TO CABLE/TV INSTALLER: This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

CAUTION:

This DVD+VCR employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference should the unit require maintenance, contact an authorized service location.

Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION: FCC Part 15

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTES ON COPYRIGHTS:

It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyrighted material without permission.

This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs. When recording and playing the pictures of these discs on a VCR, picture noise will appear.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

SERIAL NUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing.

This unit does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. **Read These Instructions**
   All safety and operating instructions should be read before the product is operated.
2. **Follow All Instructions**
   All operating and use instructions should be followed.
3. **Keep These Instructions**
   The safety and operating instructions should be retained for future reference.
4. **Heed All Warnings**
   All warnings on the product and in the operating instructions should be adhered to.
5. **Power Sources**
   This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Grounding or Polarization**
   Do not defeat the safety purpose of the polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
7. **Ventilation**
   Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
8. **Heat**
   Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. **Water and Moisture**
   Do not use this apparatus near water. For example: near a bath tub, wash bowl, kitchen sink, Laundry tub, in a wet basement; or near a swimming pool.
10. **Cleaning**
    Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with dry cloth.
11. **Power-Cord Protection**
    Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. **Overloading**
    Do not overload wall outlets, extension cords, or integral convenience receptacles, this can result in a risk of fire or electric shock.
13. **Lightning**
    Unplug this apparatus apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.
14. **Object and Liquid Entry**
    Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
15. **Attachments**
    Only use attachments/accessories specified by the manufacturer.
16. **Accessories**
    Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING

17. **Disc Tray**
    Keep your fingers well clear of the disc tray as it is closing. It can cause personal injury.
18. **Burden**
    Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.
19. **Connecting**
    When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.
20. **Sound Volume**
    Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.
21. **Sound Distortion**
    Do not allow the product to output distorted sound for a longtime. It may cause speaker overheating and fire.
22. **Earphone**
    When you use the earphone, keep the volume at a moderate level. If you use the earphone continuously with high volume sound, it may cause hearing damage.
23. **Laser Beam**
    Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.
24. **Disc**
    Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.
25. **Damage Requiring Service**
    Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normal, or has been dropped.
26. **Servicing**
    Do not attempt to service this product yourself as opening or removing the cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
27. **Replacement parts**
    When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
28. **Safety Check**
    Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

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About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

Indicates special operating features of this unit.

Indicates tips and hints for making the task easier.

Playable Discs

DVD VIDEO	DVD (8 cm/12 cm disc)
COMPACT disc DIGITAL VIDEO	Video CD (VCD) (8 cm / 12 cm disc)
COMPACT disc DIGITAL AUDIO	Audio CD (8 cm/12 cm disc)

In addition, this unit can play a DVD-R, CD-R or CD-RW that contains audio titles, MP3 or JPEG files.

Notes

– Depending on the conditions of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.
– The unit cannot play discs that contain data other than MP3 and CD-DA data.
– Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
– Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.

Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available, or other functions may be added.
Refer also to the instructions supplied with the DVDs and Video CDs. Some DVDs made for business purposes may not be playable on this unit.

Regional code of the DVD+VCR and DVDs

This DVD+VCR is designed and manufactured for playback of region 1 encoded DVD software. The region code on the labels of some DVD discs indicates which type of DVD+VCR can play those discs. This unit can play only DVD discs labeled 1 or ALL. If you try to play any other discs, the message “Check Regional Code” will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Note on DTS-encoded CDs

When playing DTS-encoded CDs, excessive noise may be exhibited from the analog stereo output. To avoid possible damage to the audio system, turn down the volume before playing back such discs, adjust the volume gradually, and keep the volume level low. To enjoy DTS Digital Surround™ playback, an external 5.1 channel DTS Digital Surround™ decoder system must be connected to the digital output of the unit.

Disc-related terms

Title (DVD only)
The main film content or accompanying feature content or music album.
Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD only)
Sections of a picture or a musical piece that are smaller than titles. A title is composed of one or several chapters. Each chapter is assigned a chapter number to enable you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Track (Video CD and audio CD only)
Sections of a picture or a musical piece on a video CD or an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

Scene
On a video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called “Scenes”. Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want.
A scene is composed of one or several tracks.

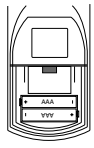
Types of video CDs

There are two types of video CDs:

Video CDs equipped with PBC (Version 2.0)
PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc.

Video CDs not equipped with PBC (Version 1.1)
Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with ⊕ and ⊖ aligned correctly.

Caution

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Remote Control Operation Range

Point the remote control at the remote sensor and press the buttons.

- **Distance:** About 23 ft (7 m) from the front of the remote sensor
- **Angle:** About 30° in each direction of the front of the remote sensor

Precautions

Handling the unit

When shipping the unit
The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packaged at the factory.

When setting up the unit
The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. In this case, position the unit away from the TV, VCR, or radio, or turn off the unit after removing the disc.

To keep the surface clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture
The DVD+VCR is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality will be poor.
Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)
For details, please contact your nearest dealer.

Notes on Discs

Handling discs

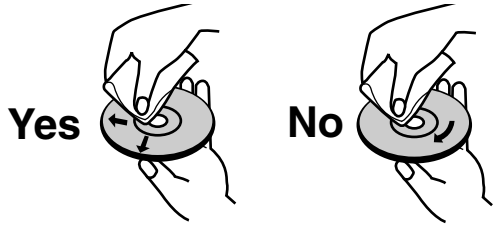
Do not touch the playback side of the disc.
Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.

Storing discs

After playing, store the disc in its case.
Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ⃠ symbol display

" ⃠ " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbols are applicable only to those discs represented by the symbol.

- **DVD** DVD
- **VCD2.0** Video CDs with the PBC (playback control) function.
- **VCD1.1** Video CDs without the PBC (playback control) function.
- **CD** Audio CDs.
- **MP3** MP3 Discs.

Setting the Output Source

You must select one of your output sources (DVD or VCR) to view on the TV screen.

- **If you want to view output source of DVD deck:**
Press DVD on the remote or DVD/VCR on the front panel until DVD indicator in the display window lights and output source of DVD deck is viewed on the TV screen.

- **If you want to view output source of VCR deck:**
Press VCR on the remote or DVD/VCR on the front panel until VCR indicator in the display window lights and output source of VCR deck is viewed on the TV screen.

NOTES
- If you insert a disc when the DVD+VCR is in the VCR mode, the DVD+VCR will be set to DVD mode automatically.
- If you insert a cassette tape without prevention tab when the DVD+VCR is in the DVD mode, the DVD+VCR will be set to VCR mode automatically.

Front Panel

Disc Tray (DVD deck)
Insert a disc here.

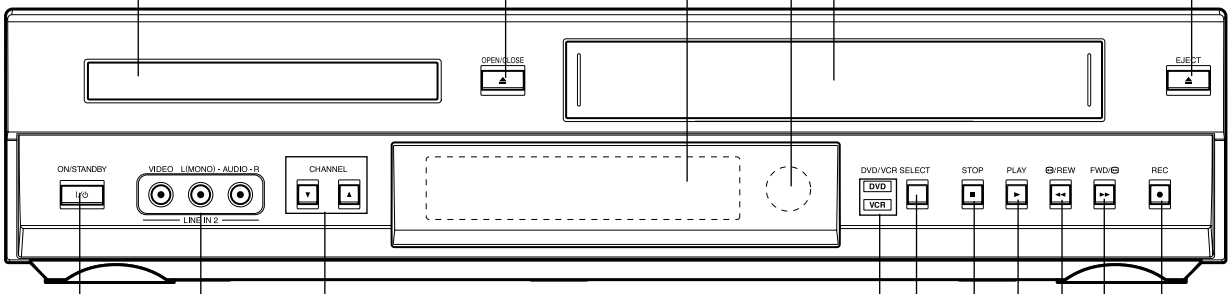
EJECT
Ejects the tape in the VCR deck.

Cassette Compartment (VCR deck)
Insert a video cassette here.

Remote Sensor
Point the DVD+VCR remote control here.

Display window
Shows the current status of the DVD+VCR.

OPEN/CLOSE
Opens or closes the disc tray.



CHANNEL (▲/▼)
To scan up or down through memorized channels.

DVD/VCR indicator
Indicates the active deck.

DVD/VCR SELECT
Toggles control between the DVD deck and the VCR deck.

LINE 2 (VIDEO IN/AUDIO IN (Left/Right))
Connect the audio/video output of an external source (Audio system, TV/Monitor, Another VCR).

STOP
Stops playback.

PLAY
To play back a recorded tape.

ON/STANBY
Switches the DVD+VCR ON and OFF.

REW
DVD: Go to beginning of current chapter/track or to previous chapter/track. Press and hold for a fast reverse search.
VCR: Rewinds the tape during the STOP mode or for fast reverse picture search.

FWD
DVD: Go to NEXT chapter/track. Press and hold for two seconds for a fast forward search.
VCR: Advances the tape during the STOP mode or for fast forward picture search.

REC
To record normally or to activate One-touch Timer Recording by repeated presses.

Display Window

DVD DVD inserted.
VCD Video CD inserted
CD Audio CD inserted.

A ↔ B Indicates A-B repeat mode.
ALL Indicates repeat all mode.

ANGLE active.

MP3 MP3 disc inserted.

PROG. Programmed playback active.

TITLE Indicates current title number.

CHP/TRK Indicates current chapter or track number.

VCR DVD+VCR functions are available and channels are selected at DVD+VCR.

TIMER DVD+VCR is in timer recording or a timer recording is programmed.

REC DVD+VCR is Recording.

CDREC DVD to VCR copy is in progress.

CH DVD+VCR is tuned to Channel XX.

SAP Indicates when a SAP BILINGUAL broadcast is being received.

ST Indicates a stereo broadcast is being received.

Indicates total playing time, elapsed time, remaining time or current deck status (Playback, Pause, etc).

HI-FI Indicates the unit is playing back a tape recorded in Hi-Fi.

SP LP EP Displays the recording and playback speed.

AM Indicates AM time. (PM is not displayed.)

A cassette is in the VCR deck.

Remote Control

DVD/VCR select button
Select the output source (DVD or VCR) to view on the TV screen.

0-9 numerical buttons
Selects numbered options in a menu.

INPUT SELECT
To select the VCR deck's source (Tuner, LINE 1, or LINE 2).

ANGLE ●
Selects a DVD camera angle if available.

SUBTITLE ●
Selects a subtitle language.

AUDIO ●
Selects an audio language (DVD) or an audio channel (CD).

INSTANT REPLAY ●
Replays through 10 seconds of playback.

PLAY ●
Starts playback.

REW ●
Rewinds the tape during the STOP mode or for fast reverse picture search.

FWD ●
Advances the tape during the STOP mode or for fast forward picture search.

SLOW ●
Forward slow playback of tape.

STOP ●
Stops playback.

PAUSE/STILL, PAUSE/STEP ●
Pause playback or recording temporarily/press repeatedly for frame-by-frame playback.

SKIP ⏮ ●
Skip to beginning of current chapter or track, press twice in quick successions to go to previous chapter or track.
Press and hold button for about two seconds to search backward. (For DVD only)

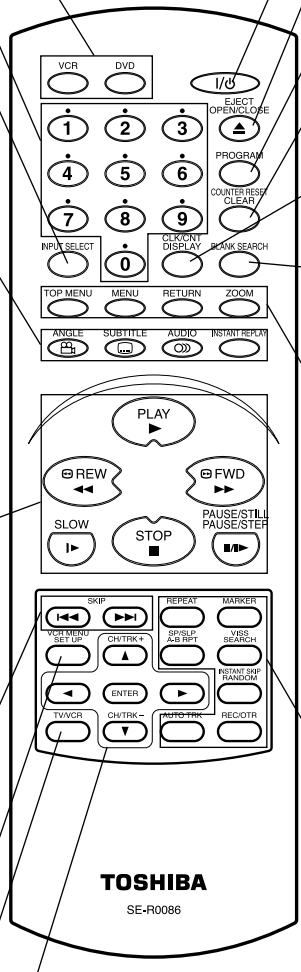
SKIP ⏭ ●
Skip to next chapter or track.
Press and hold button for about two seconds to search backward.(For DVD only)

SETUP, VCR MENU
Accesses or removes DVD setup menu and VCR menu.

TV/VCR
To view channels selected by the VCR tuner or by the TV tuner.

◀/▶/▲/▼ (left/right/up/down) ●
- Selects an option in the menu
- **CH/TRK** (+/-): Selects channel of VCR. Adjusts manually the tape's picture onscreen.

ENTER ●
- Acknowledges menu selection.
- Displays functions on the TV screen.



POWER
Switches DVD+VCR ON and OFF.

EJECT, OPEN/CLOSE
- Opens and closes the disc tray.
- Ejects the tape in the VCR deck.

PROGRAM
Accesses or removes Program menu.

COUNT RESET, CLEAR
- Resets tape counter to M 0:00:00
- Removes a track number on the program menu or a mark on the MARKER SEARCH menu.

CLK/CNT, DISPLAY
Accesses On-Screen display.
Switches among the clock, tape counter and tape remaining modes on the display.

BLANK SEARCH
Finds end points of recording.

• TOP MENU
Displays the disc's Title menu, if available.

• MENU
Accesses menu on a DVD disc.

• RETURN
- Removes the setup menu.
- Displays the menu of a video CD with PBC.

• ZOOM
Enlarges DVD video image.

• REPEAT
Repeat chapter, track, title, all.

• A-B REPEAT, SP/SLP
- Repeats sequence.
- Selects recording speed

• MARKER
Marks any point during playback.

• VISS, SEARCH
- Enters the VISS function mode.
- Displays MARKER SEARCH menu.

• RANDOM, INSTANT SKIP
- Plays tracks in random order.
- Fast forwards picture search through 30 seconds of recording.

• REC/OTR
Records normally or activates One touch Timer Recording with repeated presses.

• AUTO TRK
Adjusts automatically the tape's picture onscreen.

Note
This remote control use the same buttons for VCR and DVD functions (ex. PLAY).
When using a VCR, first press the VCR button.
When using a DVD, first press the DVD button.

Rear Panel

DVD/VCR OUT (VIDEO/AUDIO (Left/Right))
Connect to a TV with video and audio inputs.

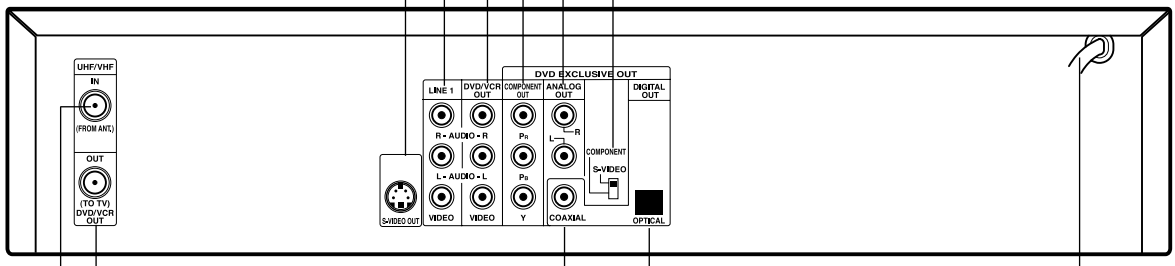
COMPONENT OUT (Y Pb Pr)
Connect to a TV with Y Pb Pr inputs.

LINE 1 (VIDEO IN/AUDIO IN (Left/Right))
Connect the audio/video output of an external source (Audio system, TV/Monitor, Another VCR).

ANALOG OUT (Left/Right) (DVD OUT)
Connect to a TV, amplifier, receiver, or stereo system.

Video Output Select Switch
Select either S-VIDEO or COMPONENT, depending on how you connect DVD Player to the TV.

S-VIDEO OUT (DVD OUT)
Connect to a S-Video Input on TV.



AC Power Cord
Plug into the power source.

DIGITAL AUDIO OUT (OPTICAL) (DVD OUT)
Connect to digital (optical) audio equipment.

UHF/VHF OUT (DVD/VCR OUT)
Connect to a TV with RF coaxial inputs.

DIGITAL AUDIO OUT (COAXIAL) (DVD OUT)
Connect to digital (coaxial) audio equipment.

UHF/VHF IN (ANTENNA INPUT)
Connect the VHF/UHF/CATV antenna to this terminal.

⚠

Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the DVD+VCR. Use connections described on pages 11-14.
- Please refer to the manuals of your TV, VCR, Stereo System or other devices as necessary to make the best connections.
- For better sound reproduction, connect the DVD+VCR's DVD/VHS AUDIO OUT jack to the audio in jacks of your amplifier, receiver, stereo or audio/video equipment. See *Optional, Preferred TV Connections* on page 13-14.

Caution

- Make sure the DVD+VCR is connected directly to the TV. Tune the TV to the correct video input channel.
- Do not connect the DVD+VCR's DVD/VHS AUDIO OUT jack to the phono in jack (record deck) of your audio system.
- Do not connect your DVD+VCR via your VCR. The DVD image could be distorted by the copy protection system.

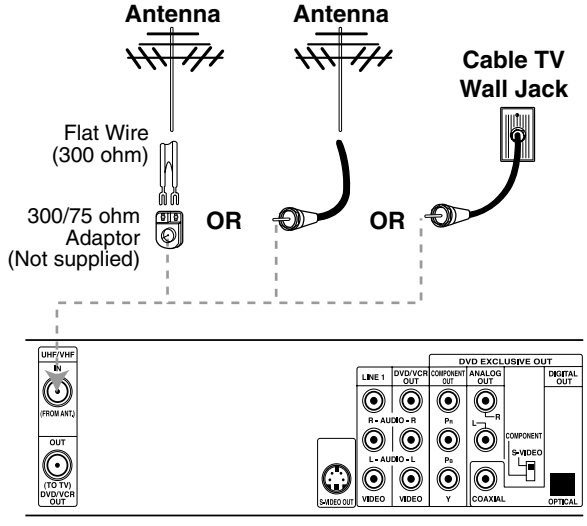
Connecting Antenna/Cable TV to DVD+VCR

1 Disconnect the antenna leads from the rear of the TV.

2 Identify the type of cable from your antenna. If it is a round cable as illustrated, it is a 75 ohm coaxial antenna cable. This cable will connect directly to the jack marked ANT.IN on your DVD+VCR.

Tip

If your antenna lead wire is a flat type antenna cable, connect it to a Antenna Adaptor (300-ohm to 75-ohm) (not supplied) and slip the Adaptor onto the ANT.IN jack. The Adaptor does not screw on to the DVD+VCR, it just slips over the jack.



Rear of DVD+VCR

Without Cable Box

If your cable wire is connected to your TV without a converter or descrambler box, unscrew the wire from your TV and attach it to the ANT.IN jack on the DVD+VCR. Use the supplied round coaxial cable to connect between the DVD+VCR's RF.OUT jack and the 75 ohm antenna input jack on the TV. With this connection, you can receive all midband, super band, and hyperband channels.

With Cable Box

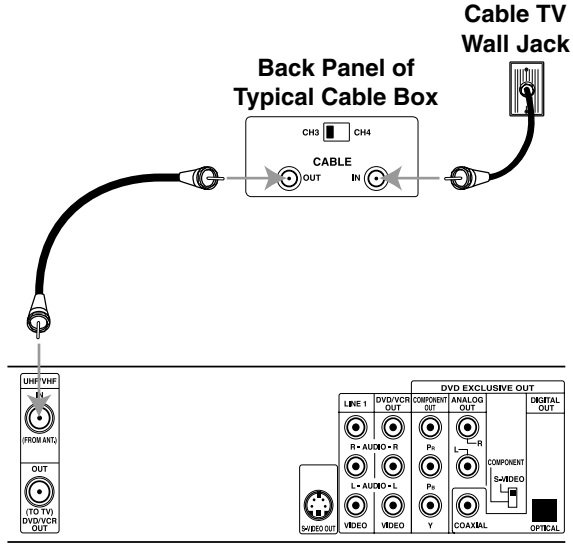
If a converter is required in your cable system, follow the instruction below:
The cable hookup permits both TV and DVD+VCR operation.

To view or record CATV channel

1 Tune the TV to the DVD+VCR output channel (CH 3 or 4).
2 Set the DVD+VCR channel selector to the output channel of the Cable Converter box by pressing the CH/TRK (+/-) or number (0-9) of your DVD+VCR. (Example: CH3)
3 Select the channel to view at the Cable Converter Box.

Notes

- With this connection, you CANNOT record one program while viewing another.
- If you are using a cable box to tune channels, it is not necessary to do Auto Channel Programming(Auto Channel Set) as indicated on page 16.



Rear of DVD+VCR

Basic TV Connections

- Make one of the following connections, depending on the capabilities of your existing equipment.

RF coaxial connection

Connect the RF.OUT jack on the DVD+VCR to the antenna in jack on the TV using the 75-ohm Coaxial Cable supplied **(R)**.

Note

If you use this connection, tune the TV to the DVD+VCR's RF output channel (CH 3 or 4).

How to set the DVD+VCR's RF output channel

1. When the DVD+VCR is turned off, press and hold CHANNEL ▲ or CHANNEL ▼ on the front panel for about five seconds.
   It will turn itself on and "RF 03" or "RF 04" appears in the display window.
2. Press CHANNEL ▲ or CHANNEL ▼ on the front panel or CH/TRK (+/-) on the remote control to change the RF output channel (CH 03 or CH 04).
3. Turn off and on the DVD+VCR.
4. Press the TV CH to 3 or 4 depending on the RF output channel you had selected.
   Now you can watch the DVD+VCR playback on CH3 or CH4 of your TV.

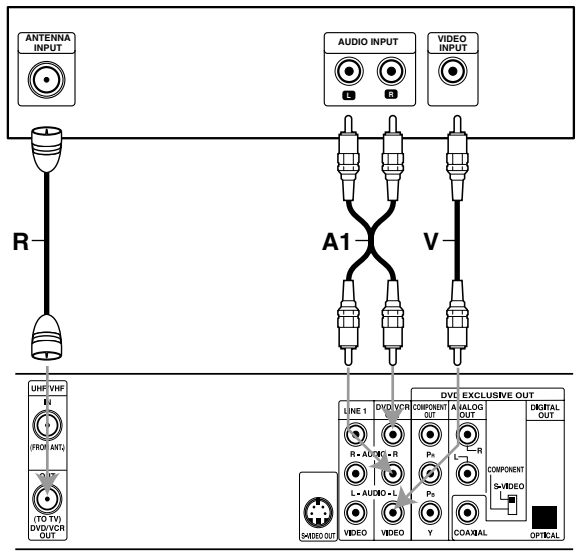
Audio/Video connection

1. Connect the DVD/VHS VIDEO OUT jack on the DVD+VCR to the video in jack on the TV using the video cable supplied **(V)**.
2. Connect the Left and Right DVD/VHS AUDIO OUT jacks on the DVD+VCR to the audio left/right in jacks on the TV **(A1)** using the supplied audio cables.

Note

If you use this connection, set the TV's source selector to VIDEO.

Rear of TV



Rear of DVD+VCR

Optional, Preferred TV Connections

Notes

- You can ONLY watch and listen to DVD playback through the connections shown below.
- **When using the COMPONENT VIDEO OUT jacks, set the video output select switch to COMPONENT. When using the S-VIDEO OUT jack, set the video output select switch to S-VIDEO.**

S-Video connection

1. Connect the S-VIDEO OUT jack on the DVD+VCR to the S-Video in jack on the TV using the optional S-Video cable **(S)**.
2. Connect the Left and Right AUDIO OUT jacks of the DVD+VCR to the audio left/right in jacks on the TV using the supplied audio cables **(A2)**.

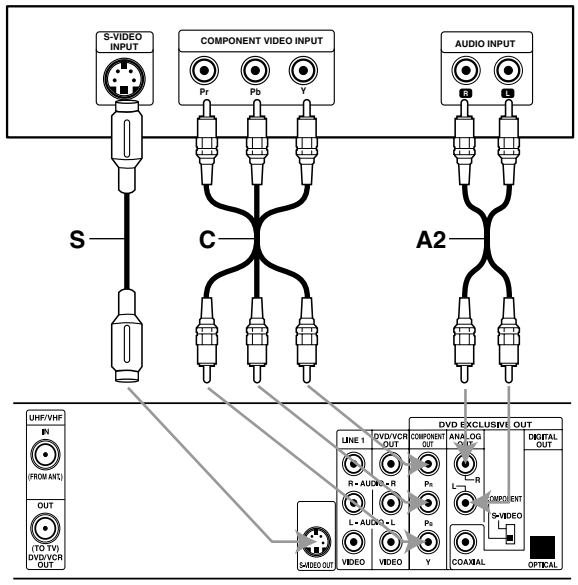
Component Video (Color Stream®) connection

1. Connect the COMPONENT VIDEO OUT jacks on the DVD Player to the corresponding in jacks on the TV using an optional Y Pb Pr cable **(C)**.
2. Connect the Left and Right AUDIO OUT jacks of the DVD+VCR to the audio left/right in jacks on the TV **(A2)** using the supplied audio cables.

Note

If the TV has an S-video input, connect the DVD player with the S-video cable. When using an S-video cable, do not connect the yellow video cable.

Rear of TV



Rear of DVD+VCR

Optional, Preferred TV Connections

Note

You can ONLY listen to DVD playback using COAXIAL **(X)**, OPTICAL **(O)** and AUDIO OUT **(A2)** connections. The tuner and VCR will still be heard through the RF.OUT **(R)** or DVD/VCR AUDIO OUT **(A1)** jack. (See page 12.)

Connecting to an amplifier equipped with two channel analog stereo or Dolby Surround

Connect the Left and Right AUDIO OUT (or DVD/VCR AUDIO OUT) jacks on the DVD+VCR to the audio left and right in jacks on your amplifier, receiver, or stereo system using the audio cables **(A1, A2)** supplied.

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2, or DTS)

1. Connect one of the DVD+VCR's DIGITAL AUDIO OUT jacks (OPTICAL **O** or COAXIAL **X**) to the corresponding in jack on your amplifier. Use an optional digital (optical **O** or coaxial **X**) audio cable.
2. You will need to activate the DVD+VCR's digital output. (See *Digital Audio Output* on page 20).

Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your DVD+VCR (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

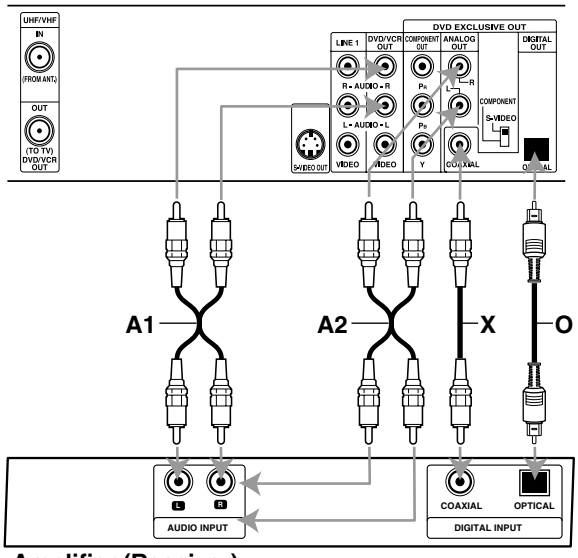
Caution:

Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Notes

– If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
– Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
– To see the audio format of the current DVD in the on-screen display, press AUDIO.

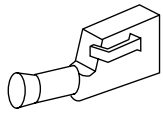
Rear of DVD+VCR



Amplifier (Receiver)

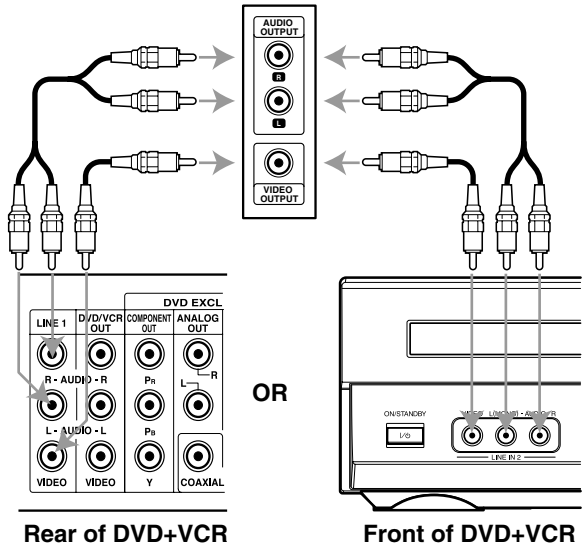
Accessory Audio/Video (A/V) Connections to DVD+VCR

Connect the VHS IN 1 or AV INPUT jacks on the DVD+VCR to the audio/video out jacks on your accessory component, using the optional audio/video cables.



Accessory Component:
VCR, Camcorder,
Video Camera,
Satellite Receiver,
Laser Disc Player

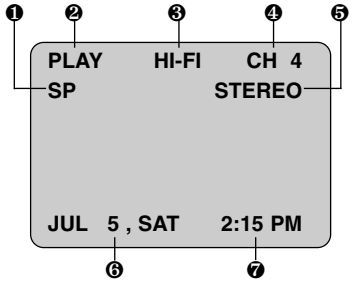
Jack panel of Accessory



Rear of DVD+VCR **Front of DVD+VCR**

On-Screen Display (OSD)

Some of these functions will be displayed every time the VCR is operated.



❶ TAPE SPEED DISPLAY
Shows the current tape speed.

❷ FUNCTION DISPLAY
Indicates the function in progress.

❸ HI-FI DISPLAY
Indicates when this unit is playing back tape recorded with Hi-Fi.

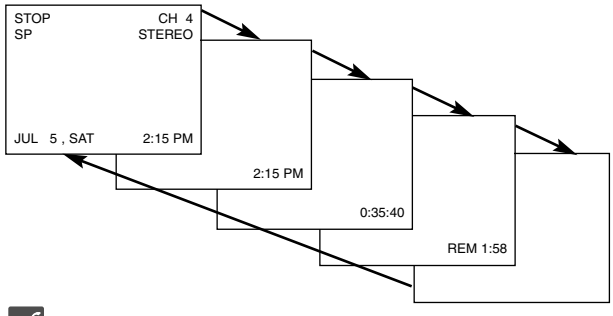
❹ CHANNEL DISPLAY
Indicates the selected channel (or LINE1, LINE2).

❺ STEREO/SAP DISPLAY (MONO is not displayed)
Shows the type of audio signal received by the VCR tuner.

❻ DATE DISPLAY
Shows the current date. (Month/Date/Day of the week format)

❼ CLOCK/COUNT/REMAIN DISPLAY
Shows the current time, the tape counter and remaining time on the tape.

Each press of the **ENTER** changes the TV screen in the following sequence.



Notes

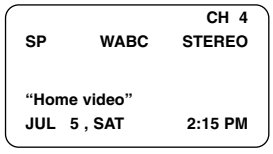
- The function displays can be seen displayed on the TV screen for 5 seconds.
- The clock (or tape counter, tape remaining) mode will continue until you press **ENTER**.
- The tape counter and the remaining tape length indicator appear only when a cassette is inserted. Also, the remaining tape length indicator appears after any tape operation.

Easy Information

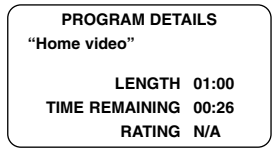
If the Extended Data Service (XDS) signals are provided along with normal TV signal in your area or during playback of a tape recorded with Extended Data Service (XDS) signals, the station ID, program title and program details are shown on the TV screen.
When viewing a channel with Extended Data Service (XDS) signals, press **ENTER** then the station ID will appear on the TV screen. Press **ENTER** again and the program details will appear on the TV screen.
When viewing a tape recorded with Extended Data Service (XDS) signals, press **ENTER** twice then the program title and program details will appear on the TV screen.

PROGRAM DETAILS

LENGTH: Indicates the run length of a program.
TIME REMAINING: Indicates the remaining time of a program.
RATING: Indicates the rating of the current program (N/A, G, PG, PG-13, R, NC-17, X and Not Rated). The rating N/A means that the motion picture ratings are not applicable to this program.



Easy Information Screen (Station ID)



Easy Information Screen (Program details)

Setting the On-Screen Display

The SETUP, clock setting, and timer recordings are accessed conveniently with On-Screen Menu Displays that lead you through each step. The following pages describe the On-screen selections to be set.

Menu Selection

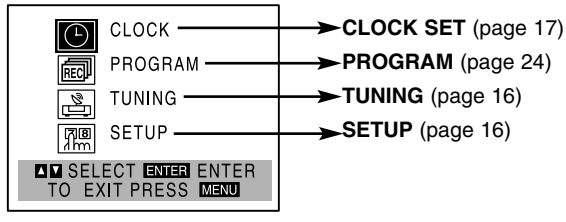
Your VCR allows remote control adjustment of several features.

1 Press VCR MENU and the MAIN menu will appear.

2 Select the desired menu with ▲/▼ button and then press ENTER.

Note
Menus remain on-screen for 3 minutes.

MAIN MENU



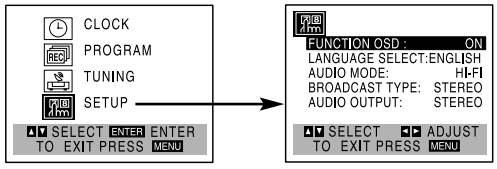
CLOCK SET (page 17)
PROGRAM (page 24)
TUNING (page 16)
SETUP (page 16)

3 Press VCR MENU when finished.

Setting the VCR Setup Menu

1 Press VCR MENU and the MAIN menu will appear.

2 Press ▲/▼ to select the SETUP menu, then press ENTER.
The SETUP menu will appear.



3 Press ▲/▼ to choose a desired option on the SETUP menu. Then press ◄/► to choose a desired setting.

FUNCTION OSD
The on-screen display of this DVD+VCR can be turned on or off.
- FUNCTION OSD can be switched between ON and OFF by pressing ◄/►.

LANGUAGE SELECT
The on-screen programming of this DVD+VCR can be displayed in either English, Spanish, or French.
- LANGUAGE SELECT can be switched among ENGLISH, SPANISH and FRENCH by pressing ◄/►.

AUDIO MODE
The DVD+VCR has two separate audio playback systems, the high quality VHS Hi-Fi system and standard NORMAL mono system. The same audio is generally recorded on both systems. The VHS Hi-Fi system plays on separate (left and right) channels, and the NORMAL system plays monaural sound. The normal track is always played so the cassette can be played on a DVD+VCR that does not have VHS Hi-Fi.
- AUDIO MODE can be switched between HI-FI and NORMAL by pressing ◄/►.

BROADCAST TYPE (STEREO/SAP/MONO)
Multichannel Television Sound (MTS) carries stereo and/or Second Audio Program (SAP) bilingual signals. Set this display to the desired position when both MTS stereo and SAP signals are received. When only one of the MTS signal is received, the DVD+VCR automatically selects the corresponding receiving mode (Stereo or SAP) regardless of the selected position. For normal operation, the display should be in the STEREO position. The DVD+VCR will then record a STEREO program when available, and record a mono program IF the program is NOT IN STEREO. For weak STEREO and/or SAP broadcasts, changing the display to mono may give clearer sound.
- BROADCAST TYPE can be switched among STEREO, SAP, and MONO by pressing ◄/►.

AUDIO OUTPUT (STEREO/LEFT/RIGHT)
Used during playback [when AUDIO MODE (HI-FI/NORMAL) is in HI-FI position] for selecting the audio output signals from the AUDIO OUT terminals (L ch and R ch), and RF.OUT.
This display setting should normally be left in the stereo position, so that when a stereo tape is played, the stereo sound will be heard through the left and right channels. If a mono tape is played and the audio output is set to stereo, the same mono sound will be heard from both left and right channels.
- AUDIO OUTPUT can be switched among STEREO, LEFT, and RIGHT by pressing ◄/►.

4 Press VCR MENU when finished.

Channel Selection

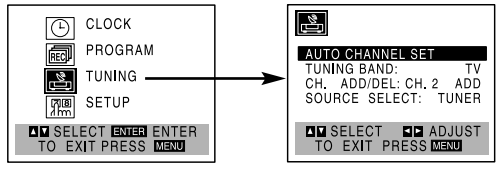
This DVD+VCR is equipped with a frequency synthesized tuner capable of receiving up to 181 channels. These include VHF channels 2-13, UHF channels 14-69 and CATV channels 1-125.

Preparation:
- Connect the DVD+VCR to the desired type of antenna or cable TV system, as shown in Connecting Antenna/Cable TV to DVD+VCR on page 11.

AUTO CHANNEL PROGRAMMING

1 Press VCR MENU and the MAIN menu will appear.

2 Press ▲/▼ to select the TUNING menu, then press ENTER.
The TUNING menu will appear.



3 Press ▼ to choose the SOURCE SELECT option, then press ◄/► to select TUNER.
Press ◄/► repeatedly to switch among TUNER, LINE1 and LINE2.

4 Press ▲/▼ to choose the AUTO CHANNEL SET option, then press ◄/► to set the channel.
The tuner will automatically cycle through all available channels in the area and place them in the tuner's memory.

5 After the AUTO CHANNEL SET PROCEEDING is complete, make sure the TUNING BAND is set appropriately (TV or CATV) by pressing ▲/▼ and choosing the correct TUNING BAND (TV or CATV) by pressing ◄/► using the TUNING menu.
Remember, TV is for the air antenna reception, CATV is for cable or wireless cable connection.

6 Press VCR MENU to return to the TV screen.

7 Use CH/TRK (+/-) or CHANNEL (▲/▼) on the front panel to cycle the DVD+VCR through the channels in memory.

TO ADD OR ERASE CHANNELS FROM MEMORY
This feature allows you to add or erase channels from memory manually.

1 Press ▼ to choose the CH. ADD/DEL option on the TUNING menu. Press ◄/► to select a channel to add or erase.

2 Press **ENTER** to add or erase the channel. Repeat steps 1 and 2 to add or erase channels.

3 Press **VCR MENU** to return to the TV screen.

Setting the Clock

The DVD+VCR gives you two ways to set the time and date: the Auto Clock Feature or manually. The Auto Clock Feature enables the DVD+VCR to set up the clock when the DVD+VCR is turned off.

Things to know before starting

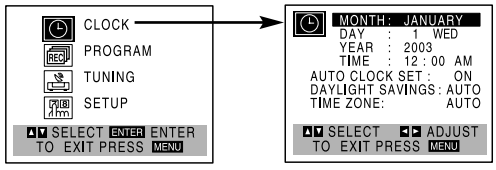
- The clock uses the 12-hour system. (Be sure to set AM and PM correctly.)
- The initial Clock Setting is **JANUARY 1, 2003, 12:00 AM**.

Auto Clock Set

The Auto Clock Set feature is set to ON at the factory. In the ON setting, the DVD+VCR looks for a channel carrying XDS (Extended Data Services) information. XDS updates the clock using the Coordinated Universal Time.
The Auto Clock Feature enables the DVD+VCR to set up the clock when the DVD+VCR is turned off.

1 **Press VCR MENU and the MAIN menu will appear.**

2 **Press ▲/▼ to choose the CLOCK menu.**
Press ENTER and the CLOCK menu will appear.



3 **Press ▼ to choose the AUTO CLOCK SET option.**
Press ◄/► to choose ON.
The Auto Clock Set feature is set to ON at the factory. In the ON setting, the DVD+VCR looks for a channel carrying XDS (Extended Data Services) information. XDS updates the clock using the Coordinated Universal Time.

4 **Press ▼ to choose the DAYLIGHT SAVINGS item.**
Press ◄/► to choose AUTO, ON or OFF.
If you choose AUTO, the VCR sets the clock using the DST information broadcast in the signal (channel).
If you choose ON, the VCR sets the clock when the Daylight Saving Time is started and ended.

5 **Press ▼ to choose the TIME ZONE item.**
Press ◄/► to choose the correct time zone (AUTO, EASTERN, CENTRAL, MOUNTAIN, PACIFIC, ALASKA or HAWAII).
If "AUTO" is selected as the time zone, the VCR sets the clock using the first Coordinated Universal Time information it finds in a broadcast signal.

6 **Press VCR MENU when finished.**

7 **Turn off the DVD+VCR and the auto clock setting works.**

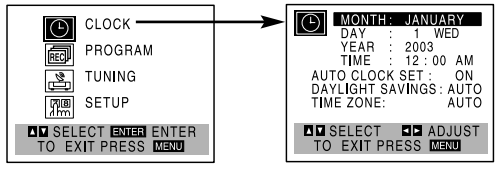
Note
There are cases where the TV station does not send or sends wrong date and/or time information and the DVD+VCR sets the incorrect time.
If this happens we recommend that you set the clock manually.

Manual Clock Set

Example: JULY 5, 2003 ; 2:15 AM

1 **Press VCR MENU and the MAIN menu will appear.**

2 **Press ▲/▼ to choose the CLOCK menu.**
Press ENTER and the CLOCK menu will appear.



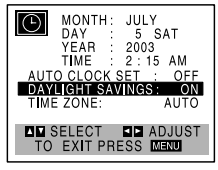
3 **Press ◄/► to choose the month.**

4 **Press ▼ to choose the DAY option.**
Use ◄/► to choose the day.
The day of the week will display automatically.

5 **Press ▼ to choose the YEAR option.**
Use ◄/► to choose the year.

6 **Press ▼ to choose the TIME option.**
Use ◄/► to choose the time.
Press and hold ◄/► to advance clock continuously.

7 **Press ▼ to choose the DAYLIGHT SAVINGS item.**
Use ◄/► to choose AUTO, ON or OFF.
If you choose AUTO, the VCR sets the clock using the DST information broadcast in the signal (channel).
If you choose ON, the VCR sets the clock when the Daylight Saving Time is started and ended.



8 **Press VCR MENU when finished.**

Note
If setting the clock manually, "AUTO CLOCK SET" must set to "OFF".
If set to "ON", an incorrect date and/or time will be entered again when the DVD+VCR is turned off.

General Explanation

This manual gives the basic instructions for operating the DVD+VCR. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol ⃠ appears on the TV screen, indicating that the operation is not permitted by the DVD+VCR or is not available on the disc.

On-Screen Display

The general playback status can be displayed on the TV screen. Some options can be changed on the menu.

On-screen display operation

1 **Press DISPLAY during playback.**

2 **Use ▲/▼ to select an option.**
The selected option will be highlighted.

3 **Use ◄/► to change the setting of an option.**
The number buttons can also be used for setting numbers (e.g., title number). For some functions, press ENTER to execute the setting.

Temporary Feedback Field Icons

- TITLE — Repeat Title
- CHAPT — Repeat Chapter
- TRACK — Repeat Track (non-PBC Video CDs and Audio CD only)
- ALL — Repeat Disc (non-PBC Video CDs and Audio CD only)
- A B — Repeat A-B
- OFF — Repeat Off
- ▮▮■ — Resume play from this point
- ⃠ — Action prohibited or not available

Notes

- Some discs may not provide all of the features on the on-screen display example shown below.
- If no button is pressed for 10 seconds, the on-screen display disappears.

DVD

Options		Function (Press ▲/▼ to select desired option)	Selection Method
Title Number	1/3	**Shows the current title number and total number of titles, and** skips to the desired title number.	◄/►, or Numeric, ENTER
Chapter Number	1/12	**Shows the current chapter number and total number of chapters, and** skips to the desired chapter number.	◄/►, or Numeric, ENTER
Time search	0:16:57	**Shows the elapsed playing time, and** searches the point by the elapsed time directly.	Numeric, ENTER
Audio language and Digital Audio Output mode	1 ENG DD 5.1 CH	**Shows the current audio soundtrack language, encoding method, and channel number, and** changes the setting.	◄/►, AUDIO
Subtitle language	OFF	**Shows the current subtitles language, and** changes the setting.	◄/►, SUBTITLE
Angle	1/1	**Shows the current angle number and total number of angles, and** changes the angle number.	◄/►, ANGLE
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◄/►

VCD2.0 VCD1.1

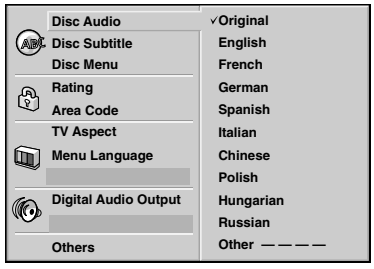
Items		Function (Press ▲/▼ to select desired item)	Selection Method
Track Number	1/4	**Displays the current track number, total number of tracks and PBC On mode, and** skips to the desired track number.	◄ / ►, or Numbers, ENTER
Time	0:16:57	**Displays the elapsed playing time (Display only)**	–
Audio Channel	STER.	**Displays the audio channel, and** changes you make to the audio channel.	◄ / ►
Sound	NORM.	**Displays the current sound mode, and** any changes you make to the setting.	◄ / ►

Initial Settings

You can set your own Personal Preferences on the DVD+VCR.

General Operation

1 Press SETUP.
The setup menu appears.



2 Use ▲/▼ to select the desired option.
The screen will show the current setting for the selected option, as well as alternate setting(s).

3 While the desired option is selected, press ▶, then ▲/▼ to select the desired setting.

4 Press ENTER to confirm your selection.
Some options require additional steps.

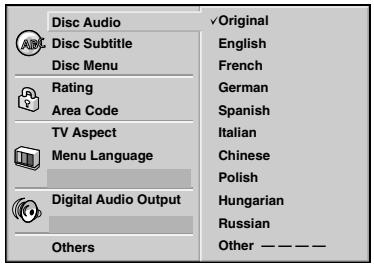
5 Press SETUP, RETURN, or PLAY to exit the setup menu.

Language

Disc Language DVD

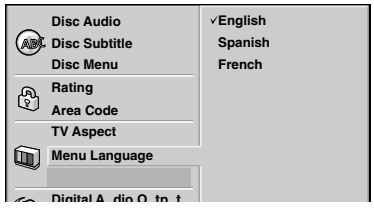
Select a language for the disc's Menu, Audio, and Subtitle.
Original : The original language set for the disc is selected.
Other : To select another language, press number buttons to enter the corresponding 4-digit number according to the language code list on page 42. If you enter the wrong language code, press CLEAR.

Notes
Disc Language selection may not work for some DVDs.



Menu Language

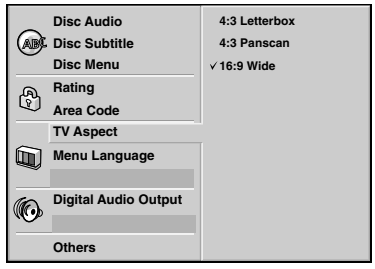
Select a language for the setup menu. This is the menu you see when you press SETUP.



Picture

TV Aspect DVD

4:3 Letterbox: Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.
4:3 Panscan: Select when a standard 4:3 TV is connected. Displays pictures cropped to fill your TV screen. Both sides of the picture are cut off.
16:9 Wide: Select when a 16:9 wide TV is connected.



Sound

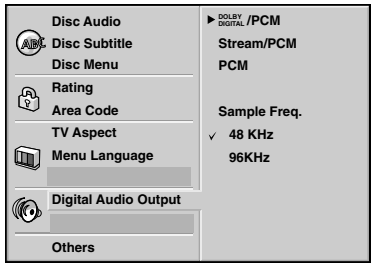
Digital Audio Output

Each DVD disc has a variety of audio output options. Set the DVD+VCR's Digital Audio Output according to the type of audio system you use.

DOLBY DIGITAL/PCM: Select DOLBY DIGITAL/PCM if you connected the DVD+VCR's DIGITAL AUDIO OUT jack to a Dolby Digital decoder (or an amplifier or other equipment with a Dolby Digital decoder).

Stream/PCM: Select Stream/PCM if you connected the DVD+VCR's DIGITAL AUDIO OUT jack to an amplifier or other equipment with a DTS decoder, Dolby Digital decoder or MPEG decoder.

PCM: Select when connected to a 2 channel digital stereo amplifier. The DVD+VCR output sounds in the PCM 2ch format when you play a DVD video disc recorded with a Dolby Digital, MPEG1, or MPEG2 recording system.



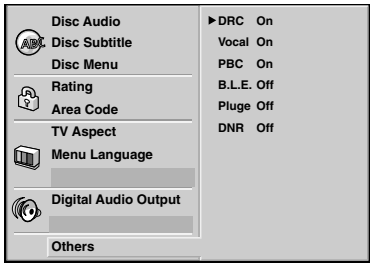
Sample Frequency

To change the Sample Frequency setting, first select the desired Digital Audio Output as indicated as above. If your receiver or amplifier is NOT capable of handling 96KHz signals, select 48KHz. When this choice is made, this unit will automatically convert any 96KHz signals to 48KHz so your system can decode them.
If your receiver or amplifier is capable of handling 96KHz signals, select 96KHz. When this choice is made, this unit will pass each type of signal through without any further processing.

Others

The DRC, Vocal, PBC, B.L.E., Pluge and DNR settings can be changed.

- Press ▲/▼ to select the desired item and press ENTER. The setting of the selected item alternates between On and Off.



Dynamic Range Control (DRC)

With the DVD format, you can hear a program's soundtrack in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). Then, you may listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

Vocal

Set Vocal to On only when a multi-channel karaoke DVD is playing. The karaoke channels on the disc will mix into normal stereo sound.

PBC

Set Playback Control (PBC) to On or Off.
On: Video CDs with PBC are played according to the PBC.
Off: Video CDs with PBC are played the same way as Audio CDs.

B.L.E. (Black Level Expansion)

To select the black level of playback pictures. Set your preference and monitor's ability.
On: Expanded grey scale. (0 IRE cut off)
Off: Standard grey scale. (7.5 IRE cut off)

Pluge (Blacker than Black)

For proper adjustment of your television brightness settings utilizing a commercially available test disc.
On: Select when you adjust the level of your TV using a commercially available test disc that contains pluge signals.
Off: For normal use.

DNR (Digital Noise Reduction)

You can reduce ambient noise in the picture.
DNR1: Normal level
DNR2: Expanded level.
Off: Off.

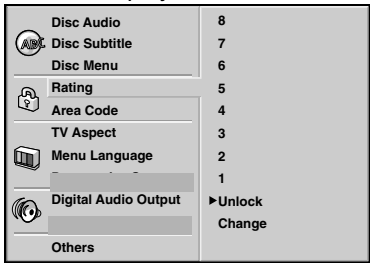
Notes

– Actual picture enhancement may vary depending on the quality of the disc.
– While the DNR2 (expanded level) can provide additional improvement in the reduction of noise in the video signal, it may produce undesirable picture artifacts on some discs. Should this occur, select a more appropriate DNR level (normal or off).
– Depending on the disc, some picture detail may be lost by the picture enhancement.
– A DVD audio disc with Dolby Digital or DTS soundtrack may be played, some DVD audio discs include moving pictures which may be modified by the above processes.

Parental Control

Rating DVD

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.



1 **Select Rating on the Setup menu using ▲/▼ buttons.**

2 **While Rating is selected, press ▶.**

3 **When you have not entered a password yet.**
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password, then press ENTER. Enter the 4-digit password again and press ENTER to verify.
When you have already entered a password;
Enter a 4-digit password using the numerical buttons to confirm the personal 4-digit security password, then press ENTER.

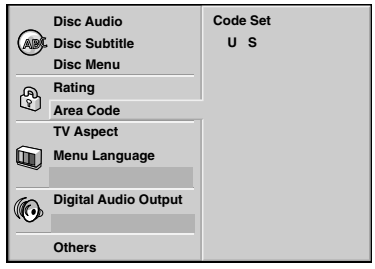
If you make a mistake before pressing ENTER, press CLEAR and enter 4-digit security password again.

4 **Select a rating from 1 to 8 using ▲/▼ buttons.**
Level 1 : DVD software for adults cannot be played back.
Level 8 : All DVD software can be played back.
The limitation will be more severe as the level number is lower.
Unlock: *If you select Unlock, Parental Control is not active. The disc will play in full.*
Ratings 1 to 8: *Some discs contain scenes not suitable for children. If you set a rating for the DVD+VCR, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.*

5 **Press ENTER to confirm your rating selection, then press SETUP to exit the menu.**

Area Code DVD

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See "Country/Area Code List", page 43.).



1 **Select Area Code using the ▲/▼ buttons on the setup menu.**

2 **While Area Code is selected, press ▶.**

3 **Follow step 3 of "Rating" on left.**

4 **Select the first character using the ▲/▼ buttons.**

5 **Press ▶ to shift to second character and select the second character using ▲/▼ buttons.**

6 **Press ENTER to confirm your Area code selection, then press SETUP to exit the menu.**

Note
Confirmation of the 4-digit password is necessary when the password is changed (see Changing the 4-digit password below).

Changing the 4-digit password

1 Follow Steps 1-2 as shown above to the left (Rating).
2 Enter the old password, then press ENTER.
3 Select Change using ▲/▼ buttons then press ENTER.
4 Enter the new 4-digit password, then press ENTER.
5 Enter exactly the same password a second time and verify by pressing ENTER.
6 Press SETUP to exit the menu.

If you forget your 4-digit password

If you forget your password, clear the current password by following the procedure below.

1 Press SETUP to display the setup menu.
Move the cursor down to "Rating".
2 Use the Number buttons to enter "210499". The cursor will move up to "Disc Audio" automatically.
The 4-digit password is cleared.
3 Enter a new password as shown above to the left (Rating).

Normal Playback

Preparation:
- Turn on the TV.
- Tune the TV to the DVD+VCR output channel (CH 3 or 4) or set the TV's source selector to VIDEO.
- If a direct VIDEO/AUDIO connection is made between the DVD+VCR and the TV, set the TV's source selector to VIDEO.
- Set the Output Source to VCR as shown in Setting the Output Source on page 6.

1 Insert a prerecorded video cassette.
The ⊂⊃ indicator will light and the DVD+VCR will power-up automatically.
- Make sure that the TIMER indicator in the display window is not lighted. If it is, press **POWER** once.
- If a tape without a safety tab is inserted, the unit will start playback automatically.

2 Press PLAY once.
PLAY appears on the TV screen .
- It is not necessary to select the tape speed for playback. It will be automatically selected by the DVD+VCR.
- In playback, the **TV/VCR** selector switches to VCR mode automatically.

3 Press STOP to stop playback.
STOP appears on the TV screen.
- If the tape reaches the end before STOP is pressed, the DVD+VCR will automatically stop, rewind, eject, and it will turn itself off.

Tracking Control

Auto Tracking
The automatic tracking function adjusts the picture to remove snow or streaks.
The AUTO TRACKING function works in the following cases:
- When the AUTO TRK button is pressed.
- A tape is played back for the first time.
- Tape speed (SP, LP, SLP) changes.
- Streaks or snow appear because of scratches on the tape.

Manual Tracking
If noise appears on the screen during playback, press either **CH/TRK (+/-)** on the remote control or **CHANNEL (▲/▼)** on the front panel until the noise on the screen is reduced.
- In case of vertical jitter, adjust these controls very carefully.
- Tracking is automatically reset to normal when the tape is ejected or the power cord is unplugged for more than 3 seconds.

Special Effect Playbacks

Special effects playback notes
- Horizontal lines (noise bars) will appear on the TV screen. This is normal.
- The audio is automatically muted during special effect modes, so there is no sound during search.
- During the high-speed picture search modes, a short period is needed to stabilize tape speed when re-entering the PLAY mode. Slight interference may be observed during this period.

Search

This function lets you quickly and visually search for a desired tape section in either direction: forward and reverse.

1 Press REW or FWD during playback.
The DVD+VCR will be activated in the SEARCH mode.
- If the DVD+VCR is left in the SEARCH mode for more than 3 minutes, the DVD+VCR will automatically enter the PLAY mode, to protect the tape and video heads.

2 To return to playback, press PLAY.

Still Picture and Frame-by-Frame Playback

1 Press PAUSE/STILL during playback.
Still picture will appear on the TV screen.
- If a still picture vibrates vertically, stabilize it by pressing CH/TRK (+/-) on the remote control.
- If the DVD+VCR is left in the STILL mode for more than 5 minutes, the DVD+VCR will automatically enter the STOP mode to protect the tape and video heads.

2 Press PAUSE/STILL repeatedly to advance the video picture one frame at a time while viewing a still picture.

3 To return to playback, press PLAY.

Slow Motion

1 Press SLOW during playback or still mode.
The tape will be played back at a speed 1/19 times slower than the normal speed.
- During slow playback, use CH/TRK (+/-) on the Remote Control to minimize noise bands.
- If slow motion mode continues for more than 3 minutes, the DVD+VCR will automatically change to playback mode.

2 To return to playback, press PLAY.

Instant Skip

This is useful for skipping commercials or short program segments.

1 Press INSTANT SKIP during the playback mode.
The tape will fast forward picture search through 30 seconds of recording.
- The skipping time can be extended by pressing INSTANT SKIP.
- Subsequent presses result in advancing the fast forward picture search time by 30-second increments (maximum 3 minutes).

2 When the search is completed, the DVD+VCR will go into playback mode automatically.

VISS (VHS Index Search System)

The VHS INDEX SEARCH SYSTEM enables you to locate the beginning of any recording made on this VCR. Whenever a recording begins, an invisible INDEX mark is recorded on the tape.

VISS Scan

VISS SCAN lets you search out each VISS mark on the recorded tape and play 5 seconds before advancing to the next VISS mark.

1 **Insert a cassette tape that has VISS signals marked.**

2 **Press the VISS button once during PLAYBACK or STOP mode.**
The VISS -- indicator will appear in the display window.

3 **Press either the FWD or the REW button.**
The VISS SCAN will start. The indicator appears simultaneously during scanning. The tape will be rewound or rapidly advanced to the next signal marked.
The tape will be played back for approximately 5 seconds, and then rewound or rapidly advanced to the next VISS signal.
- Press VISS or STOP button to stop the VISS SCAN mode.

4 **At the desired program, press the PLAY button.**
Normal playback of that program will begin.

VISS Search

You can locate the desired program and play it back automatically by designating the number of its VISS signal. Up to the 99th VISS signal from the preset position on the tape can be located.

1 **Press the VISS button once during PLAYBACK or STOP mode.**
The VISS -- indicator will appear in the display window.

2 **Enter the number of VISS signals you wish to skip.**
Up to 99 signals may be skipped from any given position on the tape.

3 **Press either the FWD or REW button once.**
The SrCH 02 (for example) message appears in the display window. When the desired VISS signal is found, playback begins automatically.
- If the end of the tape is reached during forward VISS search, the VCR will automatically stop, rewind, eject, and turn itself off.

Normal Recording

Preparation:
- Turn on the power of both the DVD+VCR and TV.
- Tune the TV to the DVD+VCR output channel (CH 3 or 4) or set the TV's source selector to VIDEO.
- If a direct VIDEO/AUDIO connection is made between the DVD+VCR and the TV, set the TV's source selector to VIDEO.

1 **Insert a video cassette that the safety tab intact.**

2 **Select the desired channel by using CH/TRK (+/-).**
- If you are recording from another source via audio/video input jacks (at the Rear or Front panel), select the LINE1 or LINE2 by pressing **INPUT SELECT**.

3 **Set the desired recording speed (SP or SLP) by pressing SP/SLP.**
- This DVD+VCR is not designed to record in LP mode.

4 **Set the MTS mode as desired (See page 17, 27).**

5 **Press REC/OTR once.**
Recording will start. (The REC indicator will light in the display window.)
- REC indicator appears only when the Output Source is set to VCR.
- If a cassette with no safety tab is loaded, the cassette will be ejected automatically.

6 **Press STOP to stop recording.**
If the tape reaches the end before STOP is pressed, the DVD+VCR will automatically stop, rewind, eject, and it will turn itself off.

To pause the recording

1 Press PAUSE/STILL to pause the tape during recording.
The REC indicator will flash in the display window.

2 When you want to continue recording, press PAUSE/STILL or press REC/OTR.
- After 5 minutes in pause mode, the tape will be stopped automatically to protect the tape and the video heads.

To record one TV program while watching another

1 Press TV/VCR to select the TV mode during recording.
The VCR indicator disappears.

2 Using the TV, select the channel to be viewed.

Tips

Always use PAUSE/STILL for best results when making changes during recording.
For example: To change channels during recording, first press PAUSE/STILL to put the unit in pause mode. Then select the desired channel on the DVD+VCR, and press PAUSE/STILL again to resume recording.

Timer Recording

This DVD+VCR can be programmed to record up to 8 programs within a period of 1 year. For unattended recording, the timer needs to know the channels to be recorded and the starting and ending times.

Things to know before starting

- If you try to set the program timer before setting the clock, PLEASE SET THE CLOCK appears for a moment and then CLOCK menu appears on the TV screen. Set the time and date before proceeding.
- Make sure a tape is in the DVD+VCR and the safety tab is in place or the tape will be automatically ejected.

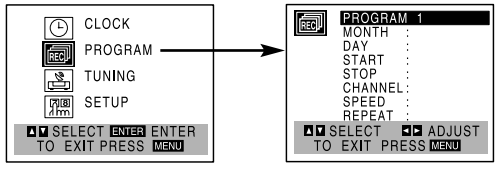
Preparation:

- Turn on the power of both the DVD+VCR and the TV.
- Be sure the TV is set to the DVD+VCR output channel (3 or 4).
- Make sure the TUNING BAND in the TUNING menu is set appropriately (TV or CATV).

1 **Press VCR MENU and the MAIN menu will appear.**

2 **Use ▲/▼ to choose the PROGRAM menu.**

3 **Press ENTER to go to the PROGRAM menu.**
The PROGRAM menu will appear.
- If all programs have already been entered, FULLY PROGRAMMED message will appear for a moment and then PROGRAM 1 will appear on the TV screen.



4 **Use ◄/► to choose the PROGRAM No. (1-8).**

5 **Use ▼ to choose the MONTH option.**
Use ◄/► to choose the desired month.

6 **Use ▼ to choose the DAY option.**
Use ◄/► to choose the desired day.

7 **Use ▼ to choose the START option.**
Use ◄/► to choose the desired start time.
Press and hold ◄/► to advance the clock faster.

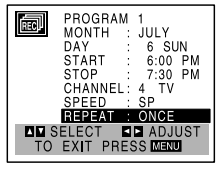
8 **Use ▼ to choose the STOP option.**
Use ◄/► to choose the desired stop time.
Press and hold ◄/► to advance the clock faster.

9 **Use ▼ to choose the CHANNEL option.**
Use ◄/► to choose the desired channel (Channel, LINE1 or LINE2).

Cable Users: If you have CABLE TV and used Cable Box in Connecting Antenna/Cable TV to DVD+VCR (page 11), using a cable box converter, you must set the channel in this step to match the cable box output channel (usually CH 3 or 4). Change channels on the cable box instead of with the DVD+VCR.

10 **Use ▼ to choose the SPEED option.**
Use ◄/► to choose the desired recording speed (AUTO, SP or SLP).
- AUTO mode determines how much tape is left and switches speed from SP to SLP, if necessary, to complete recording the program. There will be some picture and sound distortion at the point of the speed change.

11 **Use ▼ to choose the REPEAT option.**
Use ◄/► to choose the desired repeat (ONCE, WEEKLY or DAILY).
ONCE event....for recording up to 8 programs on a single day or over the days within a period of 1 year.
WEEKLY event....for recording up to 8 programs on a certain day of every week.
DAILY event....for recording up to 8 programs at the same time(s) Monday through Friday.



Tip

If the input data is wrong, use ▲ to select the data and correct it using ◄/►.

12 **Press VCR MENU, the program will be memorized at the DVD+VCR.**
- TIMER indicator lights in the display window.
- If the program preset time is past, the PAST TIME PROGRAMMED message will appear on the TV screen. Return to the incorrect program and program it with the correct time.
- If you had entered a past date, the timer recording will be performed on that date of the next year.
- Additional programs may be entered by repeating steps **1-12**.

Cable Users: If your cable hookup is via a TV converter box, you can program multiple recordings only on the converter box output channel. This is because the converter determines what channel you view through your DVD+VCR.

Tip

If you have finished programming and you want to set the DVD+VCR to record the programs you have entered.
MAKE SURE YOU HAVE INSERTED A TAPE INTO THE DVD+VCR. The DVD+VCR is now set to record the preset programs.

Note

If the power fails or the DVD+VCR is unplugged from the AC outlet, the correct clock time and timer settings are kept in memory for approximately 3 seconds. After 3 seconds, the clock and program timer must be reset when power is restored. Reset the clock according to instructions.

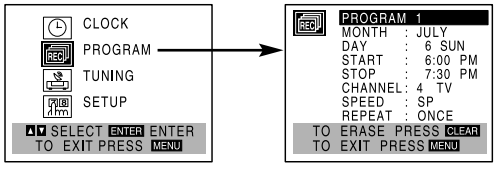
After setting a timer recording, it will start if a timer recording passes over the start time when stopping the playback or recording.

Checking (Erasing) the Timer Program

Programming can be checked whenever the DVD+VCR is turned on.

1 Press VCR MENU and the MAIN menu will appear.

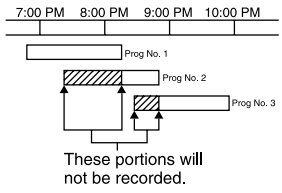
2 Use ▲/▼ to choose the PROGRAM menu.
Press ENTER and the PROGRAM menu will appear.



3 Use ◄/► to select a program you want to check or erase. If you want to erase the program, press CLEAR.

4 Press VCR MENU to return to the TV screen.

Program Priority



If the recording start and end times of preset programs overlap on the same day (see the example and diagram left), program number 2 will not be recorded until program number 1 is finished.

The first part of program number 2 will not be recorded. The same thing will happen to program number 3.

One touch Timer Recording(OTR)

One touch Timer Recording allows you to make a recording easily of a preset length without using the program timer.

Preparation:

- Turn on the power of both the DVD+VCR and the TV.
- Be sure the TV is tuned to the DVD+VCR output channel (3 or 4).
- If a direct VIDEO/AUDIO connection is made between the DVD+VCR and the TV, set the TV's source selector to VIDEO.

1 Insert a video cassette with the safety tab intact.

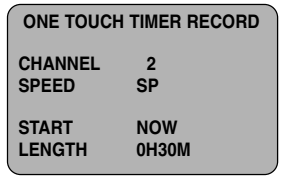
2 Select the desired channel by using CH/TRK (+/-) or number (0-9).
The channel number appears on the TV screen.
- If you are recording from another source via audio/video input jacks (at the Rear or Front panel), select the LINE1 or LINE2.

3 Set the desired recording speed (SP or SLP) by pressing SP/SLP.
The tape speed will appear on the TV screen.

4 Press REC/OTR twice.
The menu as illustrated, will appear on the TV screen.
- Recording will start. (The TIMER indicator will light)

5 Press REC/OTR repeatedly to select the recording time length.
At the end of the recording, the DVD+VCR will stop recording and shut off.
- During One touch Timer Recording, changing the channel on the DVD+VCR will not be possible.
- You can stop the recording by pressing STOP.

ONE TOUCH TIMER RECORD MENU



0H30M ..... 9H00M → 0H00M

Length Display (each additional press of REC/OTR increases recording time 30 minutes)

Checking the Recording Time

Press REC/OTR once to check the recording time. The recalled setting will automatically return to the TV screen after 6 seconds.

To extend the Recording Time

The recording time can be extended anytime by pressing REC/OTR.
Subsequent presses result in advancing the recording time by 30-minute increments to a maximum fo 9 hours.

Notes

- If you press PAUSE/STILL during One touch timer recording, the DVD+VCR will enter the recording pause mode. Instant timer recording is cancelled.
- If the DVD+VCR is set to "0H00M", the DVD+VCR goes to normal recording mode.

Dubbing and Editing

If you wish to edit or dub your camcorder (or another VCR) recordings to this DVD+VCR, the rear (or Front) panel mounted Audio and Video (A/V) input jacks make the connections quick and easy. These direct A/V jacks will also provide better picture results than using the RF jack on the rear panel.

1 Connect the camcorder's (or another VCR's) A/V outputs to your DVD+VCR as illustrated on page 14.

2 Set the input channel "LINE2". (press INPUT SELECT to select LINE2.)

- If you have connected your DVD+VCR to the A/V input jacks on the rear of DVD+VCR, you should select the input channel LINE1 by pressing **INPUT SELECT** twice.

3 Play the tape in the camcorder (or another VCR). If you have a TV attached to your DVD+VCR, you can see the video playing.

4 When your desire recording begins, press DVD+VCR's REC/OTR once to start.

Note

Before recording, please confirm the recording start position.

Copying from DVD to VCR

This unit allows you to copy the contents of a DVD to a VHS tape.

Note

If the DVD you are attempting to copy is copy protected, you will not be able to copy the disc. It is not permitted to copy Macrovision encoded DVDs. "Lock" is displayed in the display window.

1 Insert Disc

Insert the disc you wish to copy in the DVD deck and close the disc tray.

2 Insert VHS Tape

Insert a blank VHS video tape into the VCR deck.

3 Press PLAY on the DVD deck.

The DVD will go into play mode

- If the DVD disc menu appears, you may need to press the PLAY manually to begin copying.

4 Press REC on the VCR deck.

- The DVD+VCR will go into Record mode.
- "CDREC" indicator will light.

5 Stop the Copy Process

When the DVD is finished playing, press the VCR on the remote control and then press STOP (■) to end the copy. You must stop the Copy process manually when the DVD movie ends, or the unit may replay and record over and over again.

Note

When you stop the DVD playback during copying, the recording on VCR is stopped automatically.

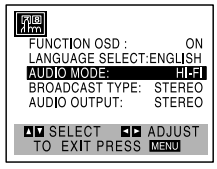
VHS Hi-Fi Stereo System/ MTS Broadcast

This DVD+VCR is equipped with the VHS Hi-Fi audio sound system for recording and playback. The information below gives a brief description of Hi-Fi audio and how to record and play a tape in the Hi-Fi audio mode.

Playback with Hi-Fi Stereo Audio Sound

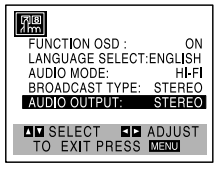
A stereo TV with AUDIO/VIDEO input jacks or a stereo audio system is required for true stereo playback. To experience the full and rich stereo sound available with Hi-Fi recorded tapes, we recommend the connection of this unit to a home stereo audio system.

1 Set the AUDIO MODE option to HI-FI on the SETUP menu .



2 Set the AUDIO OUTPUT option to STEREO position.

(STEREO) POSITION: The left channel sound (L) is heard from the left speaker and the right channel sound (R) is heard from the right speaker.
(LEFT) POSITION: The left channel sound (L) is heard from both speakers.
(RIGHT) POSITION: The right channel sound (R) is heard from both speakers.



3 Press VCR MENU.

4 Insert a cassette and press PLAY.
Adjust volume at your stereo system.

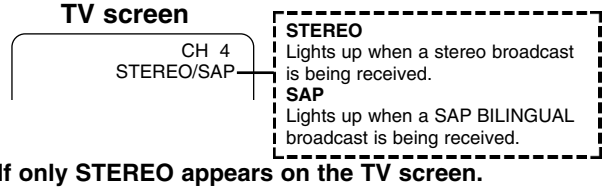
MTS (Multi-Channel TV Sound)

This DVD+VCR will decode MTS stereo and bilingual (SAP) off-the-air broadcast sound signals. It also decodes stereo TV sound from local cable companies, as long as they operate on assigned cable frequencies and use the EIA-recommended MTS stereo/bilingual TV sound system.

Multichannel TV Sound Indicator (MTS)

Shows Onscreen as illustrated below when **ENTER** is pressed.

- One or both of the indicators will light, depending on the MTS broadcast.



If only STEREO appears on the TV screen.
The DVD+VCR can record in stereo onto the VHS Hi-Fi audio tracks when the BROADCAST TYPE option is in the STEREO position. The DVD+VCR will also record mono audio onto the mono audio track.

If only SAP appears on the TV screen.
Set the BROADCAST TYPE option to SAP.

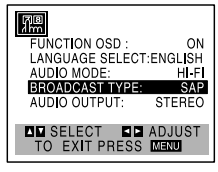
If STEREO/SAP appears on the TV screen
Use the BROADCAST TYPE option to select the desired recording mode (STEREO or SAP).

SAP (Second Audio Program) Recording

Some stations transmit a Second Audio Program, which is used for a second language or additional information. When the station broadcasts a Second Audio Program, follow the procedure below to record the SAP.

1 Insert a video cassette with the safety tab intact.

2 Set the BROADCAST TYPE option to SAP (SETUP menu).
Do this if only the SAP appears on the TV screen or you know the program will use the SAP.



3 Press VCR MENU.

4 Set the desired recording speed (SP or SLP) by pressing SP/SLP.

5 Select the desired channel. The SAP should appear on the TV screen.

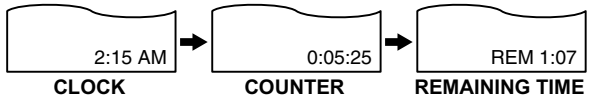
6 Press REC/OTR once
You are now recording the program you see and hear on the TV.

7 Press STOP to stop recording.

Tape Counter Memory Feature

Real-Time Counter

Shows length of tape run in hours, minutes, and seconds. Press **CLK/CNT** to select the real-time counter display.
Every press of **CLK/CNT** changes the TV screen as illustrated below.



- Counter changes to "0:00:00" when the cassette is ejected.
- The real-time counter does not operate if nothing is recorded on the tape.
- The real-time counter will not work unless a tape is inserted.

Counter Memory Function

This is useful if there is a section of tape you want to view immediately after recording or if you want to return to the same point several times.

1. **Begin recording or playing a tape.**
2. **Press CLK/CNT repeatedly to display the real-time counter appears on the TV screen.**
3. **At the point that you want locate later, reset the real-time counter to "0:00:00" by pressing COUNTER RESET.**
4. **Continue to play or record.**
5. **Press STOP when recording or playback finishes.**
6. **Press REW.**
   The tape automatically stops when the tape counter returns to about "0:00:00".

Tape Remaining

This function allows the time of the remaining tape to be displayed during recording or playback.
Press **CLK/CNT** until the REM indicator displays on the TV screen during recording or playback.

Note
The remaining tape length indicator may not be displayed correctly depending on the condition of the tape and the kind of the tape (T-140, T-160, or T-210 etc)

Additional Information

- In manual recording, Timer recording, One-touch Timer Recording, playback, or fast forward modes, the DVD+VCR automatically starts rewinding the tape at the end of the tape. The cassette will stop at the beginning of the tape and be ejected, and the DVD+VCR will turn itself off.
- After you have finished using the DVD+VCR, rewind, eject, and remove the cassette. Place the cassette in its protective sleeve to protect it from dust. It is not necessary to rewind the cassette before removing it, but if you do, it will be ready to play or record the next time you use it.
- Be sure the DVD+VCR Channel Selector is on the correct channel you wish to record. The channel that is being recorded can always be checked by setting the television on the DVD+VCR channel (3 or 4) and pressing the **TV/VCR** selector to turn the DVD+VCR's VCR indicator on.
- Do not attempt to hook up more than one television set to the DVD+VCR for either recording or playback.

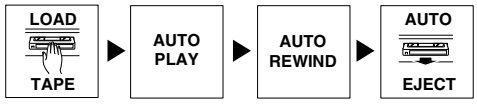
S-VHS Quasi Playback (SQPB)

- This DVD+VCR can also play back a tape which is recorded in S-VHS playback picture.
- This DVD+VCR cannot record in S-VHS format
- SQPB is an abbreviation for S-VHS Quasi Playback.

Auto Play System

This DVD+VCR features automatic playback.
Load a cassette (with the safety tab removed).

- The Output Source is changed to VCR mode automattically.
- The power turns on automatically and playback begins.
- At the end of the tape, the DVD+VCR stops, then rewinds.
- The cassette is ejected after rewinding and goto standby.



Video Head Cleaning

- Whenever a video cassette is inserted into or ejected from this unit the video head is automatically cleaned.
- However, it is possible that the heads may become clogged when playing an old or damaged tape. If the image on your screen resembles the picture on the left while playing back a tape, the heads may require cleaning.
- To clean the heads, obtain a head cleaning tape from your local video dealer. Follows the instructions that come with the cleaning tape, as excessive use can shorten head life.

Blank Search

The Blank Search enables you to locate the end of any recording. Whenever a recording creates, a blank content is recorded on the tape.
Press BLANK SEARCH during playback or in the stop mode and rapidly advanced to find blank content.
To find next blank content, press BLANK SEARCH again.

Playing DVD and Video CD

Playback Setup DVD VCD2.0 VCD1.1

- Turn on the TV and select the video input source connected to the DVD+VCR.
- Audio system: Turn on the audio system and select the input source connected to the DVD+VCR.
- Set the Output Source to DVD as shown in Setting the Output Source on page 6.

1 Press OPEN/CLOSE to open the disc tray.

2 Load your chosen disc in the tray, with the label facing up.
When a double-sided DVD is inserted, make sure the side you want to play is facing down.

3 Press OPEN/CLOSE to close the tray.
"dISC LOAD" appears in the display window, and playback starts automatically.
If playback does not start, press PLAY.
In some cases, the disc menu might appear instead.
For some VCD discs, it might take 5 or 6 secs after pressing PLAY before the playback picture appears.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD that contains a menu.

DVD

Use ◀/▶/▲/▼ buttons to select the title/chapter you want to view, then press ENTER to start playback. Press TOP MENU or MENU to return to the menu screen.

VCD2.0

- Use the number buttons to select the track you want to view.
  Press RETURN to return to the disc menu screen.
- Menu setting and the exact operating procedures for using the disc menu may differ depending on the disc. Follow the instructions on each menu screen.
  You also may set PBC to Off under setup. See page 20.

Notes

- If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit password must be entered and/or the disc must be authorized (see Parental Control, on page 21).
- DVDs may have a region code.
- Your DVD+VCR will not play discs that have a region code different from your DVD+VCR. The region code for this DVD+VCR is 1 (one).
- Do not keep an image or on-screen displayed for a long time.

General Features

Note

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD

When a disc has more than one title, you can move to another title as follows:

- Press DISPLAY when playback is stopped, then press the appropriate numbered button (0-9) then press ENTER to select a title number.

Moving to another CHAPTER/TRACK

DVD VCD1.1

When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:

- Press SKIP (⏮) or SKIP (⏭) briefly during playback to return to the beginning of the current chapter/track or to select the next chapter/track.
- Press SKIP (⏮) twice in quick successions to step back to the previous chapter/track.
- To go directly to any chapter/track during playback, press DISPLAY. Then, press ▲/▼ to select C (chapter) (or for a Video CD, select T for track). Then, enter the chapter number using the numbered buttons (0-9).
- For two-digit numbers, press the buttons in rapid succession.

Slow Motion DVD VCD2.0 VCD1.1

1 Press PAUSE/STEP during playback.
The DVD+VCR will now go into PAUSE mode.
2 Press SKIP (⏮) or SKIP (⏭) during pause mode.
The DVD+VCR will enter SLOW mode.
3 Use SKIP (⏮) or SKIP (⏭) to select the required speed: ◀❙ 1/16, ◀❙ 1/8, ◀❙ 1/4 or ◀❙ 1/2 (backward), or ❙▶ 1/16, ❙▶ 1/8, ❙▶ 1/4 or ❙▶ 1/2 (forward).
4 To return to playback, press PLAY.

Note

Slow motion playback in reverse is not available from a Video CD.

General Features (continued)

Still Picture and Frame-by-frame playback

DVD VCD2.0 VCD1.1

1 Press PAUSE/STEP during playback.
The DVD+VCR will now go into PAUSE mode.
2 With a DVD, you can advance the picture frame by frame by pressing PAUSE/STEP repeatedly on the remote control.
3 To return to playback, press PLAY.

Search DVD VCD2.0 VCD1.1

1 Press REW or FWD for about two seconds during playback.
The DVD+VCR will now go into SEARCH mode.
2 Press REW or FWD repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X16, ◀◀X100 (backward) or ▶▶X2, ▶▶X4, ▶▶X16, ▶▶X100 (forward).
With a Video CD, the Search speed changes: ◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).
3 To return to playback, press PLAY.

Random Karaoke DVD VCD1.1

1 Press RANDOM during playback or in stop mode.
The unit automatically begins Random Playback and "RANDOM" appears on the TV screen.
2 To return to normal playback, press RANDOM until "NORMAL" appears on the TV screen.

Tips

By pressing SKIP (⏮) or SKIP (⏭) during Random playback, the unit selects another title (track) and resumes Random playback.

Note

This function only works with DVD Karaoke discs and video CD without PBC.

Time Search DVD

The Time Search function allows you to start playing at any chosen time on the disc.

1 Press DISPLAY during playback. The on-screen display appears on the screen.
The Time Search box shows the elapsed playing time of the current disc.
2 Within 10 seconds, use ▲/▼ to select the Time Search icon in the on-screen display.
The "-:--:--" appears in the Time Search box.
3 Within 10 seconds, use the numbered buttons to enter the required start time. Enter hours, minutes and seconds from left to right in the box.
If you enter the wrong numbers, press CLEAR to remove the numbers you entered. Then enter the correct numbers.
4 Within 10 seconds, press ENTER.
Playback starts from the selected time on the disc. If you enter an invalid time, playback will continue from the current point.

Selecting the sound enhancement

DVD VCD2.0 VCD1.1

1 Press DISPLAY during playback.
2 Use ▲/▼ to select the sound icon.
The sound option will be highlighted.
3 Use ◀/▶ to select "NORM", "3D SUR" or "DIALOGUE".

NORM. : Normal sound
3D SUR: This player can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.
DIALOGUE: Enhances critical center channel information to make dialogue more intelligible (only when playing a DVD video disc recorded on the Dolby Digital recording system).
- To use this enhancement on audio output from the DIGITAL AUDIO OUT jack, be sure to set "Digital Audio Output" to "PCM". See page 20.

Repeat DVD VCD2.0 VCD1.1

DVD Video Discs - Repeat Chapter/Title/Off

1 To repeat the currently playing chapter, press REPEAT.
The Repeat Chapter icon appears on the TV screen.
2 To repeat the title currently playing, press REPEAT a second time.
The Repeat Title icon appears on the TV screen.
3 To exit Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

Video CDs - Repeat Track/All/Off

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the TV screen.
2 To repeat the disc currently playing, press REPEAT two times.
The Repeat All icon appears on the TV screen.
3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the TV screen.

Note

- On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Repeat function.
See page 20.
- If you press SKIP (⏮) twice or SKIP (⏭) during Repeat Chapter/Track playback, the repeat playback cancels.

Repeat A-B DVD VCD2.0 VCD1.1

To repeat a sequence in a title:

1 Press A-B at your chosen starting point.
A- appears briefly on the TV screen.
2 Press A-B again at your chosen end point.
A-B appears briefly on the TV screen, and the repeat sequence begins
3 To cancel the sequence, press A-B.

Zoom DVD VCD2.0 VCD1.1

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

1 Press ZOOM during playback or still playback to activate the Zoom function.
If you press ZOOM repeatedly, the magnification level increases up to six steps.
2 Use ◀/▶/▲/▼ buttons to move through the zoomed picture.
3 Press CLEAR to resume normal playback or return to the paused image.

Note

- The zoom function may not work for some DVDs.
- The zoom function may not work on multi-angle scenes.

Marker Search DVD VCD2.0 VCD1.1

You can start playback from a memorized point. Up to nine points can be memorized.
To enter a mark, follow these steps.

1 During disc playback, press MARKER when playback reaches the spot that you want to memorize.
The Marker icon will appear on the TV screen briefly.
2 Repeat step 1 to enter up to nine Marker points on a disc.

To Recall a Marked Scene

1 During disc playback, press SEARCH.
The Marker Search menu will appear on the screen.
2 Within 10 seconds, press ◀/▶ to select a Marker number that you want to recall.
3 Press ENTER.
Playback will start from the Marked scene.
4 To remove the MARKER SEARCH menu, press SEARCH.

To clear a Marked Scene

1 During disc playback, press SEARCH.
The Marker Search menu will appear on the screen.
2 Within 10 seconds, press ◀/▶ to select a Marker number that you want to erase.
3 Press CLEAR.
The Marker number will be erased from the list.
4 Repeat steps 2 and 3 to erase additional Marker numbers.
5 To remove the MARKER SEARCH menu, press SEARCH.

Special DVD Features

Checking the contents of DVD Video discs: Menus

DVDs may contain menus that allow you to access special features. To use the disc menu, press MENU. Then, press the appropriate number button to select an option. Or, use ◀/▶/▲/▼ buttons to highlight your selection, then press ENTER.

Title Menu DVD

1 Press TOP MENU.
If the current title has a menu, the menu will appear on the screen. Otherwise, the disc menu may appear.

2 The menu can list camera angles, spoken language and subtitle options, and chapters for the title.

3 To remove the title menu, press TOP MENU again.

Disc Menu DVD

1 Press MENU.
The disc menu is displayed.

2 To remove the disc menu, press MENU again.

Camera Angle DVD

If the disc contains sequences recorded from different camera angles, the angle icon blinks on the TV screen. You can then change the camera angle if you wish.

- Press ANGLE repeatedly during playback to select a desired angle.
The number of the current angle appears on the display.

Changing the Audio Language DVD

Press AUDIO repeatedly during playback to hear a different audio language or audio track.

Changing the Audio Channel

VCD2.0 VCD1.1

Press AUDIO repeatedly during playback to hear a different audio channel (STEREO, LEFT or RIGHT).

Subtitles DVD

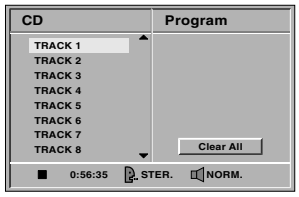
Press SUBTITLE repeatedly during playback to see the different subtitle languages.

Note

If ⃠ appears, the feature is not available on the disc.

Playing an Audio CD

1 **Insert a disc and close the tray.**
The menu appears on the TV screen.



Audio CD menu

2 **Press ▲/▼ to select a track then press PLAY.**
Playback starts.
During playback, the current track's elapsed playing time will appear on the display window.
Playback will stop at the end of the disc.

3 **To stop playback at any other time, press STOP.**

Pause CD

1 Press PAUSE/STEP during playback.

2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track CD

- Press SKIP (▶▶I) or SKIP (I◀◀) briefly during playback to go to the next track or to return to the beginning of the current track.
- Press SKIP (I◀◀) twice in quick successions to step back to the previous track.
- To go directly to any track, enter the track number using the numbered buttons (0-9) during playback.

Repeat Track/All/Off CD

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.

2 To repeat all tracks on a disc, press REPEAT a second time.
The Repeat All icon appears on the menu screen.

3 To cancel Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the menu screen.

Note

The REPEAT button is not available when the E mark appears.

Press PROGRAM to disappear the E mark.

Search CD

1 Press and hold REW or FWD for about two seconds during playback.
The player will now go into SEARCH mode.

2 Press REW or FWD repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).

3 Search speed and direction are indicated on the menu screen.

4 To exit SEARCH mode, press PLAY.

Random CD

1 Press RANDOM during playback or when playback is stopped.

The unit automatically begins Random Playback and "RAND." appears on the menu screen.

2 To return to normal playback, press RANDOM repeatedly until "RAND." disappears on the menu screen.

Repeat A-B CD

To repeat a sequence.

1 During disc playback, press A-B at your chosen starting point.
The Repeat icon and "A -" appears on the menu screen.

2 Press A-B again at your chosen end point.
The Repeat icon and "A B" appears on the menu screen, and the sequence begins to play repeatedly.

3 To exit the sequence and return to normal play, press A-B again.
The Repeat icon and "OFF" appear on the menu screen.

Selecting the sound enhancement CD

1 Press DISPLAY during playback.

2 Use ◀/▶ to select the sound icon.
The sound option will be highlighted.

3 Use ▲/▼ to select "NORM." or "3D SUR".

NORM. : Normal sound
3D SUR: This player can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

Changing the Audio Channel CD

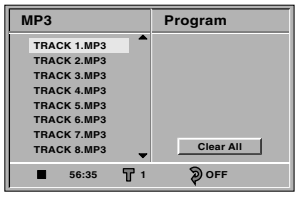
Press AUDIO repeatedly during playback to hear a different audio channel (STER., LEFT, or RIGHT).

Playing an MP3 disc MP3

The DVD Player can play MP3 formatted recordings on CD-ROM, CD-R or CD-RW discs.
Before playing MP3 recordings, read the notes on MP3 Recordings on right.

1 **Insert a disc and close the tray.**
The MP3/JPEG/WMA choice menu appears on the TV screen.

2 **Press ▲/▼ to select the MP3 then press ENTER.**
The MP3 menu appears on the TV screen.



MP3 menu

3 **Press ▲/▼ to select a track then press PLAY.**
Playback starts.
During playback, the current track's elapsed playing time will appear on the display.
Playback will stop at the end of the disc.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

4 **To stop playback at any other time, press STOP.**

Pause MP3

1 Press PAUSE/STEP during playback.
2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track MP3

- Press SKIP (▶▶I) or SKIP (I◀◀) briefly during playback to advance to the next track or to return to the beginning of the current track.
- Press SKIP (I◀◀) twice in quick successions to step back to the previous track.

Repeat Track/All/Off MP3

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.
2 To repeat all tracks on a disc, press REPEAT two times.
The Repeat All icon appears on the menu screen.
3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the menu screen.

Note

- The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.
- If you press SKIP (I◀◀) twice or SKIP (▶▶I) during Repeat Track playback, the repeat playback cancels.

Notes on MP3 Discs

About MP3

- An MP3 file is audio data compressed by using the MPEG1 audio layer-3 file-coding scheme. We call files that have the ".mp3" file extension "MP3 files".
- The player cannot read an MP3 file that has a file extension other than ".mp3".
- The player cannot read a non MP3 encoded file that has a file extension ".mp3".

MP3 Disc compatibility with this player is limited as follows:

1. Sampling Frequency / only at 44.1kHz
2. Bit rate / within 32 - 320kbps
3. CD-R physical format should be "ISO 9660"
4. If you record MP3 files using the software which cannot create a FILE SYSTEM, for example "Direct-CD" etc., it is impossible to playback MP3 files. We recommend that you use "Easy-CD Creator", which creates an ISO9660 file system.
5. A single session disc requires MP3 files in the first track. If there is no MP3 file in the 1st track, it cannot playback MP3 files. If you wish to playback MP3 files, format all the data in the disc or use a new one.
6. We do not recommend using CD-RW discs. Please use finished CD-R discs only.
7. File names should be named using 8 letters or less and must incorporate ".mp3" extension
e.g. "********.MP3".
8. Do not use special letters such as "_?!><+*}{`[@]:;\/.," etc.
9. Total number of files on the disc should be less than 200.
10. Use 74 minute CD-R discs (650M), Do not use 80 minute CD-R (700M) software

This DVD player requires discs/recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 files). That require certain pre-existing conditions (see above) to insure compatible playback.

Customers should also note that permission is required in order to download MP3 files and music from the Internet. TOSHIBA cannot grant such permission. Permission should always be sought from the copyright owner.

Viewing a JPEG disc JPEG

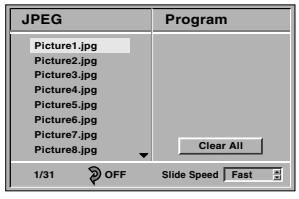
This DVD Player can play discs with JPEG files on it. Make sure the resolution of the JPEG files is less than 2 mega pixels (2M).

Notes

- Depending upon the size and number of the JPEG files, it could take a long time for the DVD player to read the disc's contents. If you don't see an on-screen display after several minutes, some of the files are too big — reduce the resolution of the JPEG files to less than 2 mega pixels and burn another disc.
- Total number of files on the disc should be less than 200.
- Some discs/files may be incompatible due to different recording format or condition of discs/files.

1 Insert a disc and close the tray.
The MP3/JPEG/WMA choice menu appears on the TV screen.

2 Press ▲/▼ to select the JPEG then press ENTER.
The JPEG menu appears on the TV screen.
Press RETURN to move to the previous menu (MP3/JPEG/WMA choice menu).



JPEG menu

3 If you want to view a particular file, press ▲/▼ to highlight a file and press ENTER or PLAY.
Viewing the file proceeding starts.
During viewing a file, press DISPLAY or RETURN to move to the previous menu (JPEG menu).
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

Tip

There are three viewing Slide Speed options: Fast, Normal, and Slow. Press ◄/► to highlight the Slide Speed then press ▲/▼ to select the option you want to use, and press ENTER.

4 To stop viewing at any other time, press STOP.
The JPEG menu appears.

Moving to another File

- Press SKIP (⏮) or SKIP (⏭) once during viewing to advance to the next file or to the previous file.

Repeat All/Off

1 To repeat all files on a disc, press REPEAT when JPEG menu appears.
The Repeat All icon appears on the menu screen.

2 Press PLAY or ENTER to start repeat playback.

3 To cancel Repeat mode, first press STOP to stop playback then press REPEAT when JPEG menu appears.
The Repeat Off icon appears on the menu screen.

Note

The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.

Notes on JPEG Files

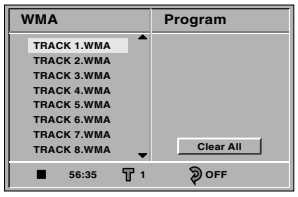
- When you are using software such as "Easy CD Creator" to burn the jpeg files into the CD-R, ensure that all the selected files have the ".jpg" extensions when copying into the CD layout.
- If the files have ".jpe" or ".jpeg" extensions, please rename them as ".jpg" files.
- File names without ".jpg" extension will not be able to be read by this DVD+VCR. Even though the files are shown as JPEG image files in windows explorer.

Playing an WMA disc WMA

The DVD Player can play WMA formatted recordings on CD-ROM, CD-R or CD-RW discs.

1 **Insert a disc and close the tray.**
The MP3/JPEG/WMA choice menu appears on the TV screen.

2 **Press ▲/▼ to select the WMA then press ENTER.**
The WMA menu appears on the TV screen.



WMA menu

3 **Press ▲/▼ to select a track then press PLAY.**
Playback starts.
During playback, the current track's elapsed playing time will appear on the display.
Playback will stop at the end of the disc.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

4 **To stop playback at any other time, press STOP.**

Pause WMA

1 Press PAUSE/STEP during playback.
2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track WMA

- Press SKIP (▶▶I) or SKIP (I◀◀) briefly during playback to advance to the next track or to return to the beginning of the current track.
- Press SKIP (I◀◀) twice in quick successions to step back to the previous track.

Repeat Track/All/Off WMA

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.
2 To repeat all tracks on a disc, press REPEAT two times.
The Repeat All icon appears on the menu screen.
3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the menu screen.

Note

- The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.
- If you press SKIP (I◀◀) twice or SKIP (▶▶I) during Repeat Track playback, the repeat playback will be canceled.

WMA Disc compatibility with this player is limited as follows:

1. Sampling Frequency / within 32 - 44kHz
2. Bit rate / within 48 - 80kbps

Programmed Playback CD MP3 JPEG WMA VCD2.0 VCD1.1

Programmed Playback with Audio CD, MP3, JPEG and WMA Disc CD MP3 JPEG WMA

Program allows you to store your favorite tracks (or files) for a particular disc in the player memory. Program can contain 32 tracks (Audio CD/Video CD) or 60 tracks (MP3/JPEG/WMA disc).

1 Insert a disc and close the tray.
- The Audio CD menu appears.
- If MP3, JPEG or WMA disc is inserted, the MP3/JPEG/WMA choice menu appears on the TV screen.
  Press ▲/▼ to select the MP3, JPEG or WMA then press ENTER. The MP3, JPEG or WMA menu appears on the TV screen. Press RETURN to move to the previous menu (MP3/JPEG/WMA choice menu).

2 Press PROGRAM in the stop mode or during playback (Audio CD, MP3 and WMA only) to enter the Program Edit mode.

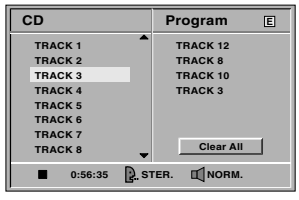
The E mark will appear to the right of the word Program on the right side of the menu screen.

Note

Press PROGRAM to exit the Program Edit mode; the E mark will disappear.

3 Press ▲/▼ to select a track/file then press ENTER to place the selected track/file on the Program list.

4 Repeat step 3 to place additional tracks/files on the Program list.



For example: Audio CD menu

5 Press ▶.
The programmed track/file you selected last is highlighted on the program list.

6 Press ▲/▼ to select the track/file you want to start playing.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

7 Press ENTER or PLAY to start.
Playback begins in the order in which you programmed the tracks/files and "PROG." appears in the display window. Playback stops after playing the last programmed track/file on the program list.

Note

The programmed tracks/files are cleared when the power is turned off or the disc is removed.

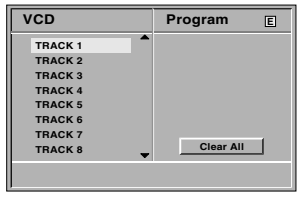
Programmed Playback with Video CD VCD2.0 VCD1.1

Note

On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Program function. See page 20.

1 Insert Video CD and close the tray.

2 Press PROGRAM while playback is stopped.
The VCD Program menu will appear.



Note

Press RETURN or PROGRAM to exit the Program menu.

3 Follow steps 3-7 of "Programmed Playback with Audio CD, MP3, JPEG or WMA Disc" on left.

Tip

To resume normal playback from programmed playback

Press and hold PROGRAM for 3 seconds until "PROG." indicator disappears in the display window.

Programmed Playback (Continued)

Repeat Programmed Tracks/All/Off

CD MP3 WMA

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.

2 To repeat all tracks on the program list, press REPEAT two times.
The Repeat All icon appears on the menu screen.

3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the menu screen.

Note

If you press SKIP (⏮) twice or SKIP (⏭) during Repeat Track playback, the repeat playback cancels.

Repeat Programmed All/Off JPEG

1 To repeat all files on the program list, press REPEAT when JPEG menu appears.
The Repeat All icon appears on the menu screen.

2 Press PLAY or ENTER to start repeat playback.

3 To cancel Repeat mode, first press STOP to stop playback then press REPEAT when JPEG menu appears.

Note

The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.

Erasing a Track/File from Program List

1 Press PROGRAM during playback or in the stop mode to enter the Program Edit mode.
The E mark will appear.

Note

JPEG can be programmed only in stop mode (when menu screen is displayed.)

2 Press ▶ to move to the Program list.

3 Use ▲/▼ to select the track/file that you wish to erase from the Program list.

4 Press CLEAR.
The track/file will be erased from the Program list.

Erasing the Complete Program List

1 Follow steps 1-2 of “Erasing a Track/File from Program List” as above.

2 Use ▲/▼ to select “Clear All”, then press ENTER.
The complete Program for the disc will be erased.
The programs are also cleared when the disc is removed.

Additional Information - DVD Part

One Touch Replay

Press INSTANT REPLAY during playback and the disc will reverse picture search through 10 seconds of playback. And then the playback will start from the point again.

Screen Saver

A screen saver image appears when you leave the DVD Player in stop mode for about five minutes.

Video Mode Setting DVD VCD2.0 VCD1.1

- With certain discs, the playback picture may be flickering or Dot Crawl is shown on straight lines. That means Vertical interpolation or De-interlace is not perfectly matched with the disc. In this case, the picture quality may be improved by changing the video mode.
- To change the video mode, press and hold DISPLAY about 3 seconds during disc playback. The new video mode number selected is displayed on the TV screen. Check whether the video quality has improved. If not, repeat the above procedure until picture quality is improved.
- Video mode sequence:
  Video1 → Video2 → Film → Adapt → Auto.
- If you turn off the power, the video mode will return to initial default state (Auto).

Detailed Description of each Video Mode

Auto : The source material of the DVD video (film material or video material) is determined from disc information.

Video1 : Suitable for playing video based content with comparatively little motion.

Video2 : Suitable for playing video based content with comparatively more motion.

Film : Suitable for playing film based content or video based material recorded by the progressive scan method.

Adapt : Determines the appropriate mode (film or video) during disc playback, and automatically selects the proper mode. Suitable for playing a disc comprised of film and video based content.

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction
No power.	• The power cord is disconnected.	• Plug the power cord into the wall outlet securely.
The power is on, but the DVD+VCR does not work.	• No disc is inserted. • No tape is inserted.	• Insert a disc or tape. (Check that the disc or tape indicator in the display window is lit.)
No picture.	• The TV is not set to receive DVD+VCR signal output.	• Select the appropriate video input mode on the TV so the picture from the DVD+VCR appears on the TV screen.
	• TV/VCR mode for DVD+VCR is set to TV.	• Press the TV/VCR button on the remote control repeatedly to choose VCR mode. TV indicator disappears in the display window.
	• The video cable is not connected securely.	• Connect the video cable securely.
	• The connected TV power is turned off.	• Turn on the TV.
No sound.	• The equipment connected with the audio cable is not set to receive DVD+VCR signal output.	• Select the correct input mode of the audio receiver so you can listen to the sound from the DVD+VCR.
	• The audio cables are not connected securely.	• Connect the audio cable securely.
	• The power of the equipment connected with the audio cable is turned off.	• Turn on the equipment connected with the audio cable.
	• The Digital Audio Output is set to the wrong position.	• Set the Digital Audio Output to the correct position, then turn on the DVD+VCR again by pressing POWER.
The playback picture is poor.	• The disc is dirty.	• Clean the disc.
	• Tape heads are dirty.	• Clean video heads.
	• Tape is a rental or was recorded on another VCR.	• Use CH/TRK (+/-) for manual tracking adjustment while tape is playing.
The DVD+VCR does not start playback.	• No disc is inserted. • No tape is inserted.	• Insert a disc or tape. (Check that the disc or tape indicator in the display window is lit.)
	• An unplayable disc is inserted.	• Insert a playable disc. (Check the disc type, color system, and Regional code.)
	• The disc is placed upside down.	• Place the disc with the playback side down.
	• The disc is not placed within the guide.	• Place the disc on the disc tray correctly inside the guide.
	• The disc is dirty.	• Clean the disc.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
The remote control does not work properly.	• The remote control is not pointed at the remote sensor of the DVD+VCR.	• Point the remote control at the remote sensor of the DVD+VCR.
	• The remote control is too far from the DVD+VCR.	• Operate the remote control within 23 ft (7 m).
	• There is an obstacle in the path of the remote control and the DVD+VCR.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.
	• This remote control use the same buttons for VCR and DVD functions (ex. PLAY).	• When using a VCR, first press the VCR button. When using a DVD, first press the DVD button.

Troubleshooting (Continued)

Symptom	Cause	Correction
Some channels are skipped over when using CH/TRK (+/-)	• Those channels were deleted with the CH. ADD/DEL option.	• Use CH. ADD/DEL. to restore channels. See “Channel Selection” on page 16.
Picture and sound of broadcasting channel are weak or missing.	• Antenna or cables are loose.	• Tighten connections or replace cable.
	• Wrong TUNING BAND option is being used.	• Try all TUNING BAND options. See “Channel Selection” on page 16 for details.
Camcorder image is not shown.	• Camcorder is off.	• Turn camcorder on and operate properly.
Camcorder image via A/V input to DVD+VCR is not shown on TV screen.	• DVD+VCR SOURCE SELECT is not set to LINE1 or LINE2.	• Press INPUT SELECT to select LINE input channel (LINE1 or LINE2).
Timer recording is not possible.	• Clock in DVD+VCR is not set to correct time.	• Set clock to correct time. See “Setting the Clock” on page 17.
	• Timer has been programmed incorrectly.	• Reprogram Timer. See “Timer Recording” on page 24.
	• TIMER indicator does not appear after programming timer.	• Reprogram Timer
TIMER indicator appears after DVD+VCR is turned off.	• DVD+VCR is in Timer Recording mode.	• This is the normal indication that the DVD+VCR is in TIMER mode.
Stereo Audio Record and/or Playback is not present.	• TV is not Stereo-compatible.	• No action is possible.
	• Broadcast program is not in stereo format.	• No action is possible.
	• DVD+VCR A/V Out jacks are not connected to TV A/V In jacks.	• Make A/V connections. Stereo is available only via A/V output from DVD+VCR.
	• DVD+VCR Audio/Video Out is not selected for viewing at the TV.	• Select AUX or A/V source as TV input.
	• DVD+VCR BROADCAST TYPE mode is set to SAP or MONO.	• Set BROADCAST TYPE mode to STEREO. See “Setting the VCR Setup Menu” on page 16.

Moisture Condensation

Moisture condensation can occur:	In locations where moisture condensation may occur:
• When the DVD+VCR is moved from a cold place to a warm place.	• Keep the DVD+VCR plugged into an AC power outlet with POWER On. This will help prevent condensation.
• Under extremely humid conditions.	• When condensation has occurred, wait a few hours for the DVD+VCR to dry before using it.

Language Code List

Enter the appropriate code number for the initial settings “Disc Audio”, “Disc Subtitle” and/or “Disc Menu” (See page 19).

Code	Language	Code	Language	Code	Language	Code	Language
6566	Abkhazian	7074	Fiji	7678	Lingala	8373	Singhalese
6565	Afar	7073	Finnish	7684	Lithuanian	8375	Slovak
6570	Afrikaans	7082	French	7775	Macedonian	8376	Slovenian
8381	Albanian	7089	Frisian	7771	Malagasy	8379	Somali
6577	Amharic	7176	Galician	7783	Malay	6983	Spanish
6582	Arabic	7565	Georgian	7776	Malayalam	8385	Sudanese
7289	Armenian	6869	German	7784	Maltese	8387	Swahili
6583	Assamese	6976	Greek	7773	Maori	8386	Swedish
6588	Aymara	7576	Greenlandic	7782	Marathi	8476	Tagalog
6590	Azerbaijani	7178	Guarani	7779	Moldavian	8471	Tajik
6665	Bashkir	7185	Gujarati	7778	Mongolian	8465	Tamil
6985	Basque	7265	Hausa	7865	Nauru	8484	Tatar
6678	Bengali; Bangla	7387	Hebrew	7869	Nepali	8469	Telugu
6890	Bhutani	7273	Hindi	7879	Norwegian	8472	Thai
6672	Bihari	7285	Hungarian	7982	Oriya	6679	Tibetan
6682	Breton	7383	Icelandic	8065	Panjabi	8473	Tigrinya
6671	Bulgarian	7378	Indonesian	8083	Pashto, Pushto	8479	Tonga
7789	Burmese	7365	Interlingua	7065	Persian	8482	Turkish
6669	Byelorussian	7165	Irish	8076	Polish	8475	Turkmen
7577	Cambodian	7384	Italian	8084	Portuguese	8487	Twi
6765	Catalan	7465	Japanese	8185	Quechua	8575	Ukrainian
9072	Chinese	7487	Javanese	8277	Rhaeto-Romance	8582	Urdu
6779	Corsican	7578	Kannada	8279	Romanian	8590	Uzbek
7282	Croatian	7583	Kashmiri	8285	Russian	8673	Vietnamese
6783	Czech	7575	Kazakh	8377	Samoan	8679	Volapük
6865	Danish	7589	Kirghiz	8365	Sanskrit	6789	Welsh
7876	Dutch	7579	Korean	7168	Scots Gaelic	8779	Wolof
6978	English	7585	Kurdish	8382	Serbian	8872	Xhosa
6979	Esperanto	7679	Laothian	8372	Serbo-Croatian	7473	Yiddish
6984	Estonian	7665	Latin	8378	Shona	8979	Yoruba
7079	Faeroese	7686	Latvian, Lettish	8368	Sindhi	9085	Zulu

Country/Area Code List

Enter the appropriate code number for the initial setting “Area Code” (See page 21).

Code	Country/Area
AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AZ	Azerbaidjan
BA	Bosnia-Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling) Islands
CF	Central African Republic
CG	Congo
CH	Switzerland
CI	Ivory Coast
CK	Cook Islands
CL	Chile
CM	Cameroon
CN	China
CO	Colombia
CR	Costa Rica
CS	Former Czechoslovakia
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
DO	Dominican Republic
DZ	Algeria
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara
ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
FM	Micronesia
FO	Faroe Islands
FR	France
FX	France (European Territory)
GA	Gabon
GB	Great Britain
GD	Grenada
GE	Georgia
GF	French Guyana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe (French)
GQ	Equatorial Guinea
GR	Greece
GS	S. Georgia & S. Sandwich Isls.
GT	Guatemala
GU	Guam (USA)
GW	Guinea Bissau
GY	Guyana
HK	Hong Kong
HM	Heard and McDonald Islands
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia6
KI	Kiribati
KM	Comoros
KN	Saint Kitts & Nevis Anguilla
KP	North Korea
KR	South Korea
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Laos
LB	Lebanon
LC	Saint Lucia
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libya
MA	Morocco
MC	Monaco
MD	Moldavia
MG	Madagascar
MH	Marshall Islands
MK	Macedonia
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana Islands
MQ	Martinique (French)
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia (French)
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru
PF	Polynesia (French)
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and Miquelon
PN	Pitcairn Island
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Reunion (French)
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan Mayen Islands
SK	Slovak Republic
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Saint Tome and Principe
SU	Former USSR
SV	El Salvador
SY	Syria
SZ	Swaziland
TC	Turks and Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand
TJ	Tadjikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania
UA	Ukraine
UG	Uganda
UK	United Kingdom
UM	USA Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State
VC	Saint Vincent & Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (USA)
VN	Vietnam
VU	Vanuatu
WF	Wallis and Futuna Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe

Specifications

General

Power requirements	AC 120V , 60 Hz
Power consumption	23W
Dimensions (approx.)	430 X 97.5 X 293 mm (16.9 x 3.9 x 11.5 inches) (w x h x d)
Mass (approx.)	4.8 kg (10.58 lbs)
Operating temperature	5˚C to 40˚C (41˚F to 104˚F)
Operating humidity	5 % to 90 %
Signal system	NTSC

Inputs

ANTENNA IN	Antenna or CATV input, 75 ohms
VHS VIDEO IN (LINE1, 2)	1 Vp-p 75 ohms, sync negative, RCA jack x 2
VHS AUDIO IN (LINE1, 2)	-6.0 dBm more than 47 kohms, RCA jack (L, R) x 2

Outputs

VIDEO OUT	1 Vp-p 75 ohms, sync negative
S-VIDEO OUT	(Y) 1.0 V (p-p), 75 ohms, negative sync, Mini DIN 4-pin x 1 (C) 0.3 V (p-p) 75 ohms
COMPONENT VIDEO OUT	(Y) 1.0 V (p-p), 75 ohms, negative sync, RCA jack x 1 (Pb)/(Pr) 0.7 V (p-p), 75 ohms, RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 ohms, RCA jack x 1
Audio output (optical audio)	5 V (p-p), 75 Ω, Optical connector x 1
Audio output (analog audio)	2.0 Vrms (1 KHz, 0 dB), 330 ohms, RCA jack (L, R) x 1
RF OUT	Channel 3 or 4

VCR Specifications

Head system	Four head helical scan azimuth system
Timer	12-hour display type with AM, PM
Tape speed	SP: 33.35 mm/sec, LP: 16.67 mm/sec, SLP: 11.12 mm/sec
Tape width	12.7 mm
Maximum recording time	SP: 2 HOURS (T-120), SLP: 6 HOURS (T-120)/8 HOURS (T-160)
Rewind time	About 3 minutes (T-120)
Antenna	75 ohms (VHF/UHF)
VHF output signal	Channel 3 or 4 (Switchable)
Channel coverage	VHF: 2-13, UHF: 14-69, CATV: 1-125 (4A, A-W, W+1 - W+84, A-5 - A-1)
Frequency range	20Hz to 20kHz
Signal-to-noise ratio	More than 43dB
Dynamic range	More than 88 dB
Channel separation	More than 60 dB

DVD Specifications

Laser system	Semiconductor laser, wavelength 650 nm
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz, DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT jacks only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 95 dB (DVD/CD)

Accessory:

Video cable x 1, Audio cable x 1, RF 75-ohm Coaxial Cable x 1, Remote control x 1, Batteries(AAA) x 2

- Design and specifications are subject to change without notice.

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DTS and DTS Digital Out are trademarks of Digital Theater Systems, Inc.

LIMITED WARRANTY DVD VIDEO PLAYER

Toshiba America Consumer Products, Inc. (“TACP”), Toshiba Hawaii (“THI”) and Toshiba Canada Limited (“TCL”) make the following limited warranties. These limited warranties extend to original purchaser or any person receiving this set as a gift from the original purchaser and to no other purchaser or transferee.

Limited Ninety (90) Day Warranty
TACP/THI warrant this product against defects in materials or workmanship for a period of ninety (90) days after the date of original retail purchase. During this period, TACP/ THI will repair or replace a defective product or part, at their option, with a new or refurbished product or part without charge to you. You must deliver the entire product to a TACP/THI Authorized Service Station. You are responsible for all transportation and insurance charges for the unit to and from the Authorized Service Station. If you live in the
U.S.A. you may, at your option, return your DVD Unit to:

Toshiba America Consumer Products Inc.
Returns Center
1420C Toshiba Dr.
Lebanon, TN 37087

Upon receipt we will, at our option, exchange the DVD Unit with a new or refurbished unit. **Canadian consumers are requested to contact TCL. In Hawaii consumers are requested to contact THI.**

Limited One (1) Year Warranty
TACP/THI further warrant the parts in this product against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. During this period, TACP/THI will repair or replace a defective product or part, at their option, with a new or refurbished product or part without charge to you, except that if a defective part is replaced after ninety (90) days from the date of the original retail purchase you pay labor charges involved in the replacement. You must also deliver the entire product to a TACP/THI Authorized Service Station. You are responsible for all transportation and insurance charges for the unit to and from the Authorized Service Station. If you live in the U.S.A. you may, at your option, return your DVD Unit to:

Toshiba America Consumer Products Inc.
Returns Center
1420C Toshiba Dr.
Lebanon, TN 37087

Upon receipt we will, at our option, exchange the DVD Unit with a new or refurbished unit. **Canadian Consumers are requested to contact TCL. In Hawaii consumers are requested to contact THI.**

Rental Units
The warranty for rental units begin with the first rental or thirty (30) days from the date of shipment to the rental firm, whichever comes first.

Commercial Units
Products sold and used for commercial use have a limited ninety (90) day warranty for all parts and labor.

Owner’s Manual
You should read the owner’s manual thoroughly before operating this product. You should complete and mail the enclosed Demographic card within ten (10) days after you, or the person who has given you this product as a gift, purchased this product. This is one way to enable TACP to provide you with better customer service and improved products. Failure to return the card will not affect your rights under this warranty.

Your Responsibility
The above warranties are subject to the following conditions:

(1) You must retain your bill of sale or provide other proof of purchase.
(2) You must notify a TACP/THI/TCL /Authorized Service Station within thirty (30) days after you discover a defective product or part.
(3) All warranty servicing of this product must be made by a TACP/THI/TCL Authorized Service Station.
(4) U.S.A. warranties are effective only if the product is purchased and operated in the Continental U.S.A. or Puerto Rico.
(5) Labor service charges for set installation. Set up, adjustment of customer controls and installation or repair of antenna systems are not covered by this warranty. Reception problems caused by inadequate antenna systems are your responsibility.
(6) Warranties extend only to defects in materials or workmanship as limited above and do not extend to any product or parts which have been lost or discarded by you or to damage to products or parts caused by misuse, accident, damage caused by Acts of God, such as lighting or fluctuations in electric power, improper installation, improper maintenance or use in violation of instructions furnished by us; or to units which have been altered or modified without authorization of TACP/THI/TCL or to damage to products or part thereof which have had the serial number removed, altered, defaced or rendered illegible.
(7) Should you elect to return your DVD Unit to TACP after the ninety (90) days and within one (1) year, or after the warranty period has expired: Call (800)-631-3811 to receive information concerning an exchange price. Payment must be enclosed with product in the form of a certified check or money order including reason for return.
(8) Physically damaged DVD Units are not acceptable for repair or exchange whether in or out of warranty and will be returned as received.

(Continued)

LIMITED WARRANTY DVD VIDEO PLAYER (Continued)

How to Obtain Warranty Service

(1) Refer to the troubleshooting guide in your owner's manual. This check list may solve your problem.
(2) In the U.S.A., only call the TACP toll free number 800-631-3811, or if in Hawaii or Canada see listing below within (30) days after you find a defective product or part.
(3) Arrange for the delivery of the product to the TACP/THI/TCL Authorized Service Station or TACP Return Center. Products shipped to the Service Station must be insured and safely and securely packed, preferably in the original shipping carton, and a letter explaining the defect and also a copy of the bill of sale or other proof of purchase must be enclosed.

In the Continental United States contact:

In Hawaii contact:
Toshiba Hawaii Inc.
327 Kamakee Street
Honolulu, HA 96814
(808)-521-5377

In Canada contact:
Consumer Electronics Group
191 McNabb Street
Markham, Ontario L3R 8H2
(905)-470-5400

Consumer Electronics Group
22171 Fraserwood Way
Richmond, B.C. V6W 1J5
(604)-303-2500

Consumer Electronics Group
1643 North Service Road
Droval, QC H9P 1J1
(514)-856-4100

All warranties implied by state law, including the implied warranties of merchantability and fitness for a particular purpose, are expressly limited to the duration of the limited warranties set forth above. With the exception of any warranties implied by state law as hereby limited, the foregoing warranty is exclusive and in lieu of all other warranties, guarantees, agreements and similar obligations of manufacturer or seller with respect to the repair or replacement of any parts. In no event shall TACP/THI be liable for consequential or incidental damages.
No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of these warranties in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of TACP/THI arising under the warranty or under any statute, or law of the United States or any state thereof, is hereby limited to ninety (90) days from the date you discover or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do not allow limitation on how long an implied warranty lasts, when an action may be brought, or the exclusion or limitation of incidental or consequential damages, so the above provisions may not apply to you.

ATTENTION CANADIAN CONSUMERS:
Canadian consumers are requested to complete the special Canadian "Warranty Registration Form" enclosed, and forward this completed form with a copy of bill of sale to TOSHIBA OF CANADA to "Register and Validate" their warranty. Product must be purchased from an Authorized Canadian Dealer. Products purchased in the U.S.A. and used in Canada are not covered by these warranties.

IMPORTANT: PACKING AND SHIPPING INSTRUCTION
When you send the product to a Service Station, you must use the original carton box and packing material, then insert the original carton box containing the unit into another carton using more packing material.

TOSHIBA

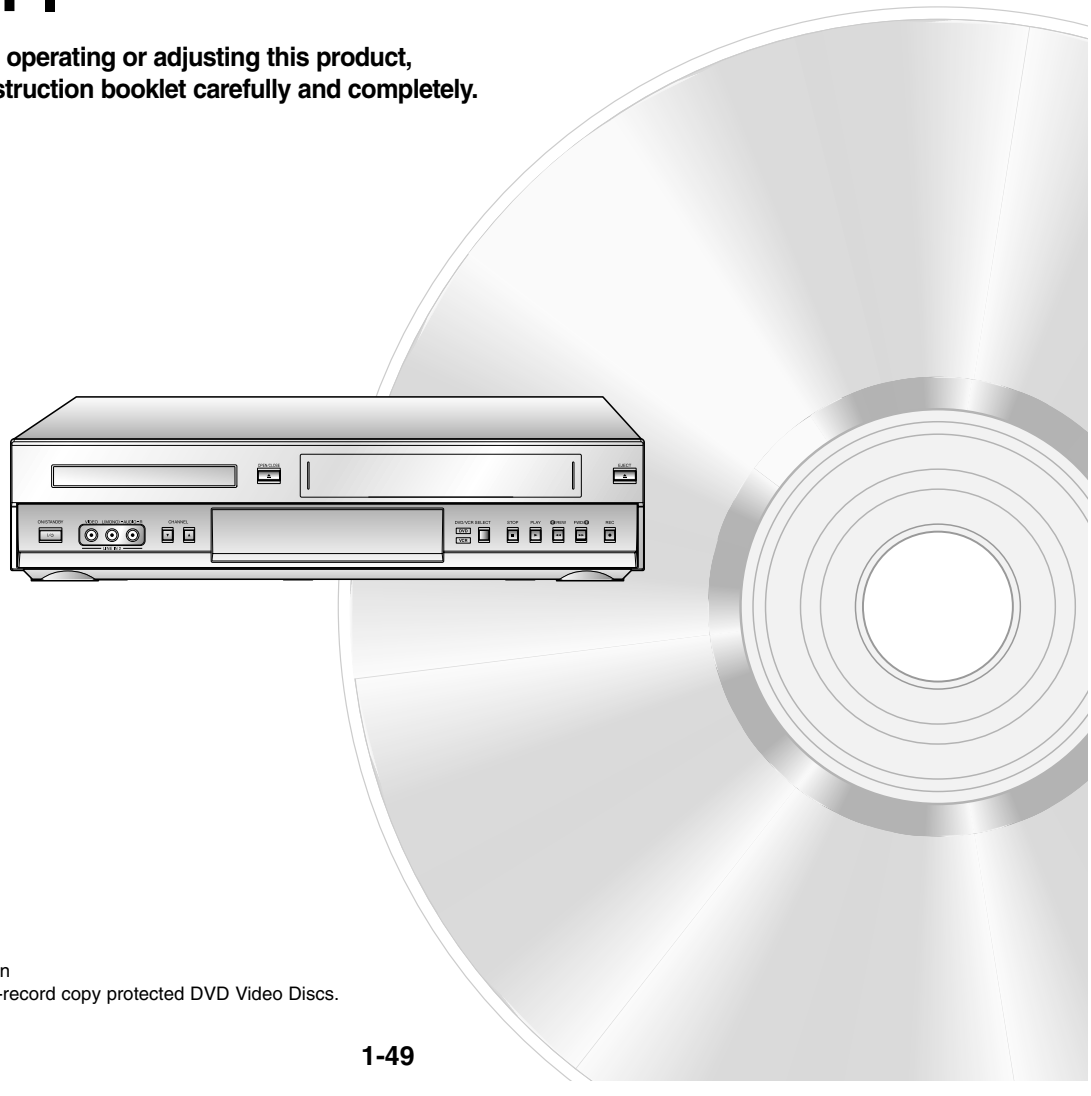
DVD VIDEO PLAYER & VIDEO CASETTE RECORDER

SD-V390-S-TU

OWNER'S MANUAL

VHS Hi-Fi

Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.



©2002 Toshiba Corporation
This device does not tape-record copy protected DVD Video Discs.

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

NOTE TO CABLE/TV INSTALLER: This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

CAUTION:

This DVD+VCR employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference should the unit require maintenance, contact an authorized service location.

Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION: FCC Part 15

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTES ON COPYRIGHTS:

It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyrighted material without permission.

This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs. When recording and playing the pictures of these discs on a VCR, picture noise will appear.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

SERIAL NUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing.

This unit does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. **Read These Instructions**
   All safety and operating instructions should be read before the product is operated.
2. **Follow All Instructions**
   All operating and use instructions should be followed.
3. **Keep These Instructions**
   The safety and operating instructions should be retained for future reference.
4. **Heed All Warnings**
   All warnings on the product and in the operating instructions should be adhered to.
5. **Power Sources**
   This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Grounding or Polarization**
   Do not defeat the safety purpose of the polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
7. **Ventilation**
   Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
8. **Heat**
   Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. **Water and Moisture**
   Do not use this apparatus near water. For example: near a bath tub, wash bowl, kitchen sink, Laundry tub, in a wet basement; or near a swimming pool.
10. **Cleaning**
    Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with dry cloth.
11. **Power-Cord Protection**
    Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. **Overloading**
    Do not overload wall outlets, extension cords, or integral convenience receptacles, this can result in a risk of fire or electric shock.
13. **Lightning**
    Unplug this apparatus apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.
14. **Object and Liquid Entry**
    Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
15. **Attachments**
    Only use attachments/accessories specified by the manufacturer.
16. **Accessories**
    Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING

17. **Disc Tray**
    Keep your fingers well clear of the disc tray as it is closing. It can cause personal injury.
18. **Burden**
    Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.
19. **Connecting**
    When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.
20. **Sound Volume**
    Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.
21. **Sound Distortion**
    Do not allow the product to output distorted sound for a longtime. It may cause speaker overheating and fire.
22. **Earphone**
    When you use the earphone, keep the volume at a moderate level. If you use the earphone continuously with high volume sound, it may cause hearing damage.
23. **Laser Beam**
    Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.
24. **Disc**
    Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.
25. **Damage Requiring Service**
    Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normal, or has been dropped.
26. **Servicing**
    Do not attempt to service this product yourself as opening or removing the cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
27. **Replacement parts**
    When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
28. **Safety Check**
    Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

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About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

Indicates special operating features of this unit.

Indicates tips and hints for making the task easier.

Playable Discs

DVD VIDEO	DVD (8 cm/12 cm disc)
COMPACT disc DIGITAL VIDEO	Video CD (VCD) (8 cm / 12 cm disc)
COMPACT disc DIGITAL AUDIO	Audio CD (8 cm/12 cm disc)

In addition, this unit can play a DVD-R, CD-R or CD-RW that contains audio titles, MP3 or JPEG files.

Notes

– Depending on the conditions of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.
– The unit cannot play discs that contain data other than MP3 and CD-DA data.
– Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
– Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.

Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available, or other functions may be added.
Refer also to the instructions supplied with the DVDs and Video CDs. Some DVDs made for business purposes may not be playable on this unit.

Regional code of the DVD+VCR and DVDs

This DVD+VCR is designed and manufactured for playback of region 1 encoded DVD software. The region code on the labels of some DVD discs indicates which type of DVD+VCR can play those discs. This unit can play only DVD discs labeled 1 or ALL. If you try to play any other discs, the message “Check Regional Code” will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Note on DTS-encoded CDs

When playing DTS-encoded CDs, excessive noise may be exhibited from the analog stereo output. To avoid possible damage to the audio system, turn down the volume before playing back such discs, adjust the volume gradually, and keep the volume level low. To enjoy DTS Digital Surround™ playback, an external 5.1 channel DTS Digital Surround™ decoder system must be connected to the digital output of the unit.

Disc-related terms

Title (DVD only)
The main film content or accompanying feature content or music album.
Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD only)
Sections of a picture or a musical piece that are smaller than titles. A title is composed of one or several chapters. Each chapter is assigned a chapter number to enable you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Track (Video CD and audio CD only)
Sections of a picture or a musical piece on a video CD or an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

Scene
On a video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called “Scenes”. Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want.
A scene is composed of one or several tracks.

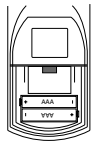
Types of video CDs

There are two types of video CDs:

Video CDs equipped with PBC (Version 2.0)
PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc.

Video CDs not equipped with PBC (Version 1.1)
Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with ⊕ and ⊖ aligned correctly.

Caution

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Remote Control Operation Range

Point the remote control at the remote sensor and press the buttons.

- **Distance:** About 23 ft (7 m) from the front of the remote sensor
- **Angle:** About 30° in each direction of the front of the remote sensor

Precautions

Handling the unit

When shipping the unit
The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packaged at the factory.

When setting up the unit
The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. In this case, position the unit away from the TV, VCR, or radio, or turn off the unit after removing the disc.

To keep the surface clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture
The DVD+VCR is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality will be poor.
Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)
For details, please contact your nearest dealer.

Notes on Discs

Handling discs

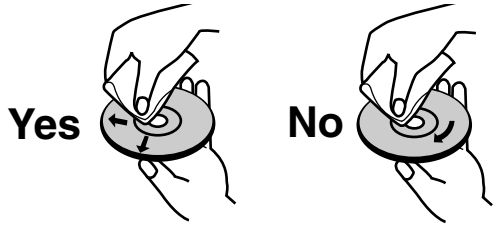
Do not touch the playback side of the disc.
Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.

Storing discs

After playing, store the disc in its case.
Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ⃠ symbol display

" ⃠ " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbols are applicable only to those discs represented by the symbol.

- **DVD** DVD
- **VCD2.0** Video CDs with the PBC (playback control) function.
- **VCD1.1** Video CDs without the PBC (playback control) function.
- **CD** Audio CDs.
- **MP3** MP3 Discs.

Setting the Output Source

You must select one of your output sources (DVD or VCR) to view on the TV screen.

- **If you want to view output source of DVD deck:**
Press DVD on the remote or DVD/VCR on the front panel until DVD indicator in the display window lights and output source of DVD deck is viewed on the TV screen.

- **If you want to view output source of VCR deck:**
Press VCR on the remote or DVD/VCR on the front panel until VCR indicator in the display window lights and output source of VCR deck is viewed on the TV screen.

NOTES

- If you insert a disc when the DVD+VCR is in the VCR mode, the DVD+VCR will be set to DVD mode automatically.
- If you insert a cassette tape without prevention tab when the DVD+VCR is in the DVD mode, the DVD+VCR will be set to VCR mode automatically.

Front Panel

Disc Tray (DVD deck)
Insert a disc here.

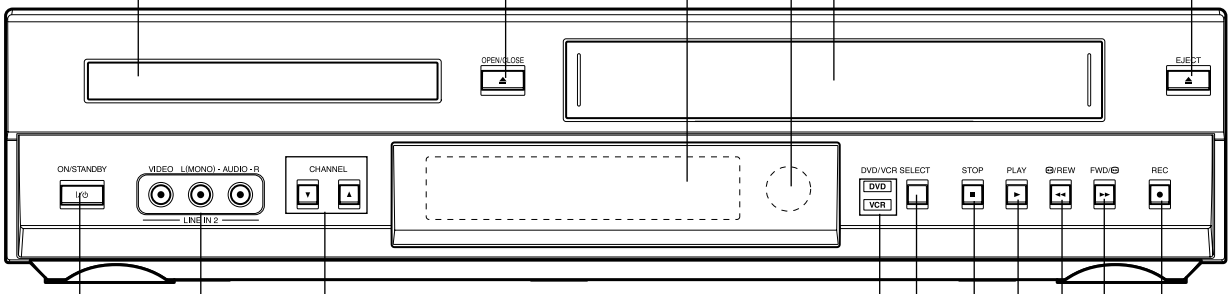
EJECT
Ejects the tape in the VCR deck.

Cassette Compartment (VCR deck)
Insert a video cassette here.

Remote Sensor
Point the DVD+VCR remote control here.

Display window
Shows the current status of the DVD+VCR.

OPEN/CLOSE
Opens or closes the disc tray.



CHANNEL (▲/▼)
To scan up or down through memorized channels.

DVD/VCR indicator
Indicates the active deck.

DVD/VCR SELECT
Toggles control between the DVD deck and the VCR deck.

LINE 2 (VIDEO IN/AUDIO IN (Left/Right))
Connect the audio/video output of an external source (Audio system, TV/Monitor, Another VCR).

STOP
Stops playback.

PLAY
To play back a recorded tape.

ON/STANBY
Switches the DVD+VCR ON and OFF.

REW
DVD: Go to beginning of current chapter/track or to previous chapter/track. Press and hold for a fast reverse search.
VCR: Rewinds the tape during the STOP mode or for fast reverse picture search.

FWD
DVD: Go to NEXT chapter/track. Press and hold for two seconds for a fast forward search.
VCR: Advances the tape during the STOP mode or for fast forward picture search.

REC
To record normally or to activate One-touch Timer Recording by repeated presses.

Display Window

DVD DVD inserted.
VCD Video CD inserted
CD Audio CD inserted.

A ⟷ B Indicates A-B repeat mode.
ALL Indicates repeat all mode.

ANGLE active.

MP3 MP3 disc inserted.

PROG. Programmed playback active.

TITLE Indicates current title number.

CHP/TRK Indicates current chapter or track number.

VCR DVD+VCR functions are available and channels are selected at DVD+VCR.

TIMER DVD+VCR is in timer recording or a timer recording is programmed.

REC DVD+VCR is Recording.

CDREC DVD to VCR copy is in progress.

CH DVD+VCR is tuned to Channel XX.

SAP Indicates when a SAP BILINGUAL broadcast is being received.

ST Indicates a stereo broadcast is being received.

Indicates total playing time, elapsed time, remaining time or current deck status (Playback, Pause, etc).

HI-FI Indicates the unit is playing back a tape recorded in Hi-Fi.

SP LP EP Displays the recording and playback speed.

AM Indicates AM time. (PM is not displayed.)

A cassette is in the VCR deck.

Remote Control

DVD/VCR select button
Select the output source (DVD or VCR) to view on the TV screen.

0-9 numerical buttons
Selects numbered options in a menu.

INPUT SELECT
To select the VCR deck's source (Tuner, LINE 1, or LINE 2).

ANGLE ●
Selects a DVD camera angle if available.

SUBTITLE ●
Selects a subtitle language.

AUDIO ●
Selects an audio language (DVD) or an audio channel (CD).

INSTANT REPLAY ●
Replays through 10 seconds of playback.

PLAY ●
Starts playback.

REW ●
Rewinds the tape during the STOP mode or for fast reverse picture search.

FWD ●
Advances the tape during the STOP mode or for fast forward picture search.

SLOW ●
Forward slow playback of tape.

STOP ●
Stops playback.

PAUSE/STILL, PAUSE/STEP ●
Pause playback or recording temporarily/press repeatedly for frame-by-frame playback.

SKIP ⏮ ●
Skip to beginning of current chapter or track, press twice in quick successions to go to previous chapter or track.
Press and hold button for about two seconds to search backward. (For DVD only)

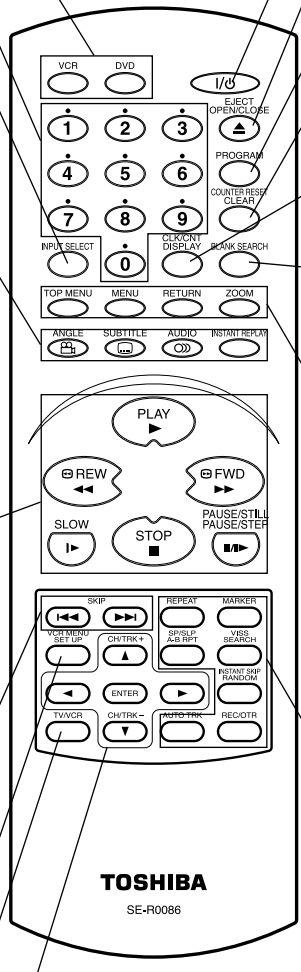
SKIP ⏭ ●
Skip to next chapter or track.
Press and hold button for about two seconds to search backward.(For DVD only)

SETUP, VCR MENU
Accesses or removes DVD setup menu and VCR menu.

TV/VCR
To view channels selected by the VCR tuner or by the TV tuner.

◀/▶/▲/▼ (left/right/up/down) ●
- Selects an option in the menu
- **CH/TRK** (+/-): Selects channel of VCR. Adjusts manually the tape's picture onscreen.

ENTER ●
- Acknowledges menu selection.
- Displays functions on the TV screen.



POWER
Switches DVD+VCR ON and OFF.

EJECT, OPEN/CLOSE
- Opens and closes the disc tray.
- Ejects the tape in the VCR deck.

PROGRAM
Accesses or removes Program menu.

COUNT RESET, CLEAR
- Resets tape counter to M 0:00:00
- Removes a track number on the program menu or a mark on the MARKER SEARCH menu.

CLK/CNT, DISPLAY
Accesses On-Screen display.
Switches among the clock, tape counter and tape remaining modes on the display.

BLANK SEARCH
Finds end points of recording.

• TOP MENU
Displays the disc's Title menu, if available.

• MENU
Accesses menu on a DVD disc.

• RETURN
- Removes the setup menu.
- Displays the menu of a video CD with PBC.

• ZOOM
Enlarges DVD video image.

• REPEAT
Repeat chapter, track, title, all.

• A-B REPEAT, SP/SLP
- Repeats sequence.
- Selects recording speed

• MARKER
Marks any point during playback.

• VISS, SEARCH
- Enters the VISS function mode.
- Displays MARKER SEARCH menu.

• RANDOM, INSTANT SKIP
- Plays tracks in random order.
- Fast forwards picture search through 30 seconds of recording.

• REC/OTR
Records normally or activates One touch Timer Recording with repeated presses.

• AUTO TRK
Adjusts automatically the tape's picture onscreen.

Note
This remote control use the same buttons for VCR and DVD functions (ex. PLAY).
When using a VCR, first press the VCR button.
When using a DVD, first press the DVD button.

Rear Panel

DVD/VCR OUT (VIDEO/AUDIO (Left/Right))
Connect to a TV with video and audio inputs.

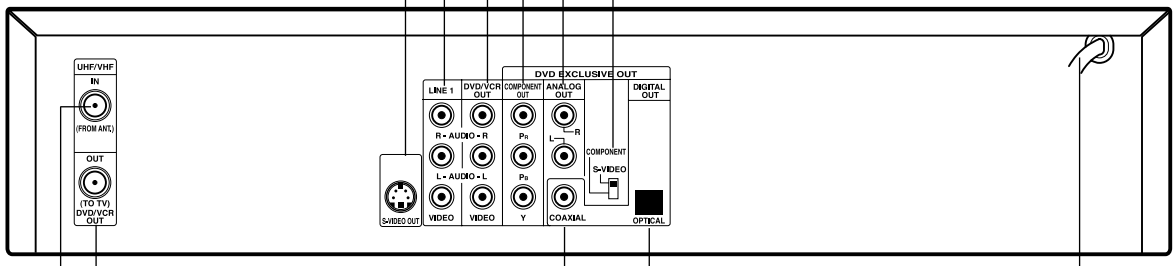
COMPONENT OUT (Y Pb Pr)
Connect to a TV with Y Pb Pr inputs.

LINE 1 (VIDEO IN/AUDIO IN (Left/Right))
Connect the audio/video output of an external source (Audio system, TV/Monitor, Another VCR).

ANALOG OUT (Left/Right) (DVD OUT)
Connect to a TV, amplifier, receiver, or stereo system.

Video Output Select Switch
Select either S-VIDEO or COMPONENT, depending on how you connect DVD Player to the TV.

S-VIDEO OUT (DVD OUT)
Connect to a S-Video Input on TV.



AC Power Cord
Plug into the power source.

DIGITAL AUDIO OUT (OPTICAL) (DVD OUT)
Connect to digital (optical) audio equipment.

UHF/VHF OUT (DVD/VCR OUT)
Connect to a TV with RF coaxial inputs.

DIGITAL AUDIO OUT (COAXIAL) (DVD OUT)
Connect to digital (coaxial) audio equipment.

UHF/VHF IN (ANTENNA INPUT)
Connect the VHF/UHF/CATV antenna to this terminal.

⚠

Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the DVD+VCR. Use connections described on pages 11-14.
- Please refer to the manuals of your TV, VCR, Stereo System or other devices as necessary to make the best connections.
- For better sound reproduction, connect the DVD+VCR's DVD/VHS AUDIO OUT jack to the audio in jacks of your amplifier, receiver, stereo or audio/video equipment. See *Optional, Preferred TV Connections* on page 13-14.

Caution

- Make sure the DVD+VCR is connected directly to the TV. Tune the TV to the correct video input channel.
- Do not connect the DVD+VCR's DVD/VHS AUDIO OUT jack to the phono in jack (record deck) of your audio system.
- Do not connect your DVD+VCR via your VCR. The DVD image could be distorted by the copy protection system.

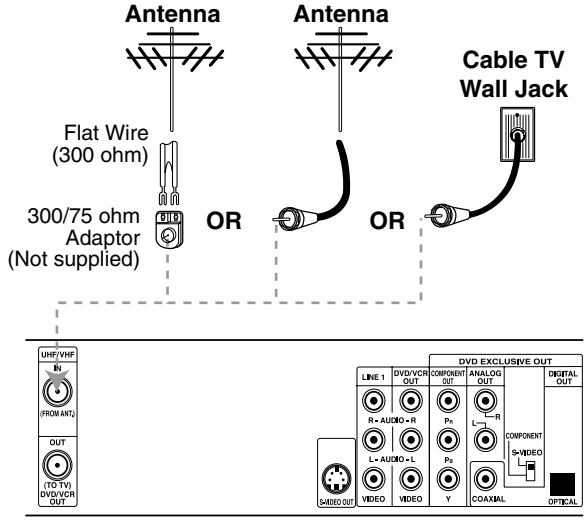
Connecting Antenna/Cable TV to DVD+VCR

1 Disconnect the antenna leads from the rear of the TV.

2 Identify the type of cable from your antenna. If it is a round cable as illustrated, it is a 75 ohm coaxial antenna cable. This cable will connect directly to the jack marked ANT.IN on your DVD+VCR.

Tip

If your antenna lead wire is a flat type antenna cable, connect it to a Antenna Adaptor (300-ohm to 75-ohm) (not supplied) and slip the Adaptor onto the ANT.IN jack. The Adaptor does not screw on to the DVD+VCR, it just slips over the jack.



Rear of DVD+VCR

Without Cable Box

If your cable wire is connected to your TV without a converter or descrambler box, unscrew the wire from your TV and attach it to the ANT.IN jack on the DVD+VCR. Use the supplied round coaxial cable to connect between the DVD+VCR's RF.OUT jack and the 75 ohm antenna input jack on the TV. With this connection, you can receive all midband, super band, and hyperband channels.

With Cable Box

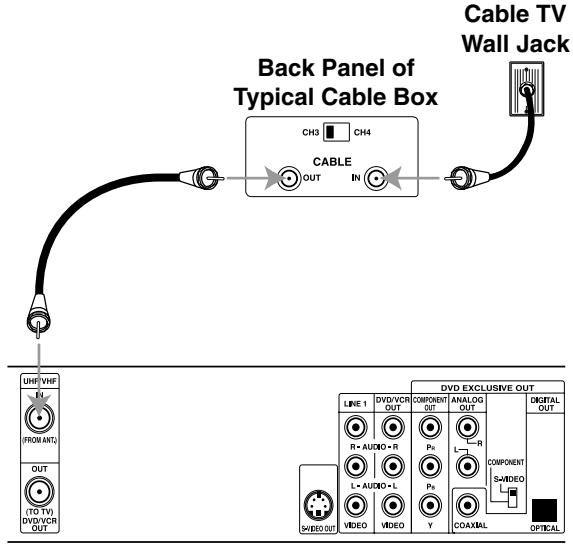
If a converter is required in your cable system, follow the instruction below:
The cable hookup permits both TV and DVD+VCR operation.

To view or record CATV channel

1 Tune the TV to the DVD+VCR output channel (CH 3 or 4).
2 Set the DVD+VCR channel selector to the output channel of the Cable Converter box by pressing the CH/TRK (+/-) or number (0-9) of your DVD+VCR. (Example: CH3)
3 Select the channel to view at the Cable Converter Box.

Notes

- With this connection, you CANNOT record one program while viewing another.
- If you are using a cable box to tune channels, it is not necessary to do Auto Channel Programming(Auto Channel Set) as indicated on page 16.



Rear of DVD+VCR

Basic TV Connections

- Make one of the following connections, depending on the capabilities of your existing equipment.

RF coaxial connection

Connect the RF.OUT jack on the DVD+VCR to the antenna in jack on the TV using the 75-ohm Coaxial Cable supplied **(R)**.

Note

If you use this connection, tune the TV to the DVD+VCR's RF output channel (CH 3 or 4).

How to set the DVD+VCR's RF output channel

1. When the DVD+VCR is turned off, press and hold CHANNEL ▲ or CHANNEL ▼ on the front panel for about five seconds.
   It will turn itself on and "RF 03" or "RF 04" appears in the display window.
2. Press CHANNEL ▲ or CHANNEL ▼ on the front panel or CH/TRK (+/-) on the remote control to change the RF output channel (CH 03 or CH 04).
3. Turn off and on the DVD+VCR.
4. Press the TV CH to 3 or 4 depending on the RF output channel you had selected.
   Now you can watch the DVD+VCR playback on CH3 or CH4 of your TV.

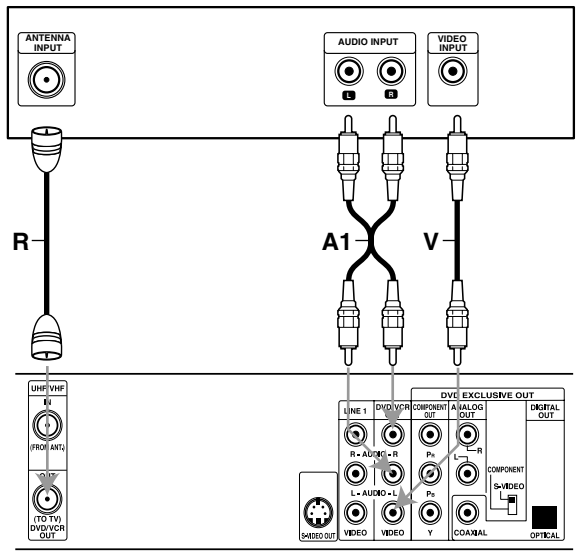
Audio/Video connection

1. Connect the DVD/VHS VIDEO OUT jack on the DVD+VCR to the video in jack on the TV using the video cable supplied **(V)**.
2. Connect the Left and Right DVD/VHS AUDIO OUT jacks on the DVD+VCR to the audio left/right in jacks on the TV **(A1)** using the supplied audio cables.

Note

If you use this connection, set the TV's source selector to VIDEO.

Rear of TV



Rear of DVD+VCR

Optional, Preferred TV Connections

Notes

- You can ONLY watch and listen to DVD playback through the connections shown below.
- **When using the COMPONENT VIDEO OUT jacks, set the video output select switch to COMPONENT. When using the S-VIDEO OUT jack, set the video output select switch to S-VIDEO.**

S-Video connection

1. Connect the S-VIDEO OUT jack on the DVD+VCR to the S-Video in jack on the TV using the optional S-Video cable **(S)**.
2. Connect the Left and Right AUDIO OUT jacks of the DVD+VCR to the audio left/right in jacks on the TV using the supplied audio cables **(A2)**.

Component Video (Color Stream®) connection

1. Connect the COMPONENT VIDEO OUT jacks on the DVD Player to the corresponding in jacks on the TV using an optional Y Pb Pr cable **(C)**.
2. Connect the Left and Right AUDIO OUT jacks of the DVD+VCR to the audio left/right in jacks on the TV **(A2)** using the supplied audio cables.

Progressive Scan (ColorStream® pro) connection

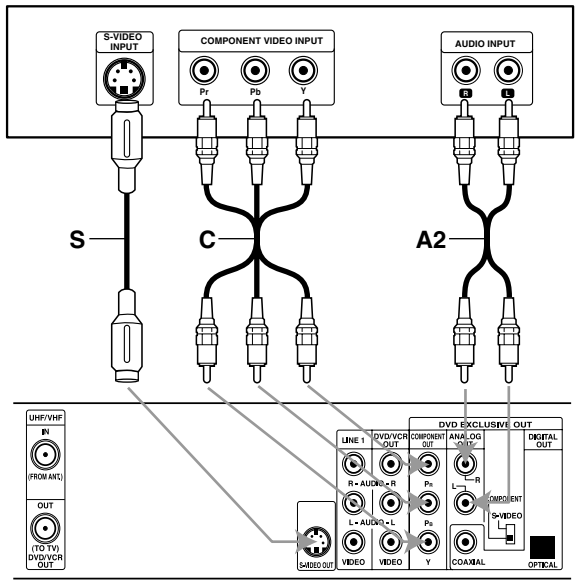
- If your television is a high-definition or “digital ready” television, you may take advantage of the DVD Player’s progressive scan output for the highest video resolution possible.
- If your TV does not accept the Progressive Scan format, the picture will appear scrambled if you select Progressive Scan output from the DVD Player.

1. Connect the COMPONENT VIDEO OUT jacks on the DVD Player to the corresponding in jacks on the TV using an optional Y Pb Pr cable **(C)**.
2. Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A2)** using the supplied audio cables.

Notes

– Set the Progressive to “On” from the setup menu, see page 19.
– Progressive scan does not function simultaneously with the analog video connections (yellow VIDEO OUT jack).

Rear of TV



Rear of DVD+VCR

Note

If the TV has an S-video input, connect the DVD player with the S-video cable. When using an S-video cable, do not connect the yellow video cable.

Optional, Preferred TV Connections

Note

You can ONLY listen to DVD playback using COAXIAL **(X)**, OPTICAL **(O)** and AUDIO OUT **(A2)** connections. The tuner and VCR will still be heard through the RF.OUT **(R)** or DVD/VHS AUDIO OUT **(A1)** jack. (See page 12.)

Connecting to an amplifier equipped with two channel analog stereo or Dolby Surround

Connect the Left and Right AUDIO OUT (or DVD/VHS AUDIO OUT) jacks on the DVD+VCR to the audio left and right in jacks on your amplifier, receiver, or stereo system using the audio cables **(A1, A2)** supplied.

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2, or DTS)

1. Connect one of the DVD+VCR's DIGITAL AUDIO OUT jacks (OPTICAL **O** or COAXIAL **X**) to the corresponding in jack on your amplifier. Use an optional digital (optical **O** or coaxial **X**) audio cable.
2. You will need to activate the DVD+VCR's digital output. (See *Digital Audio Output* on page 20).

Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your DVD+VCR (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

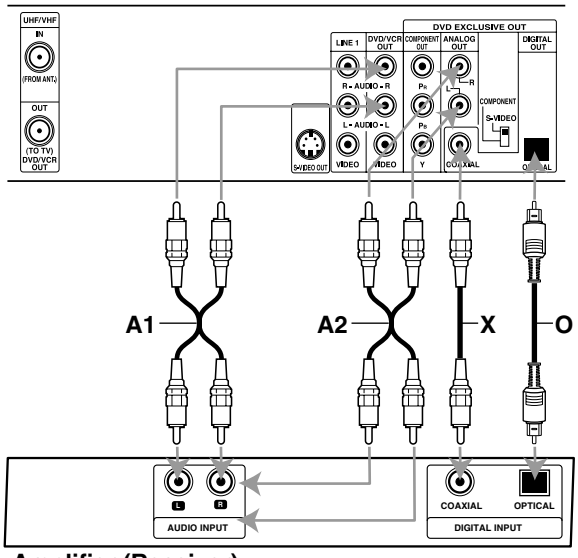
Caution:

Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Notes

– If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
– Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
– To see the audio format of the current DVD in the on-screen display, press AUDIO.

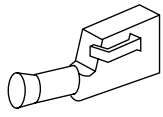
Rear of DVD+VCR



Amplifier (Receiver)

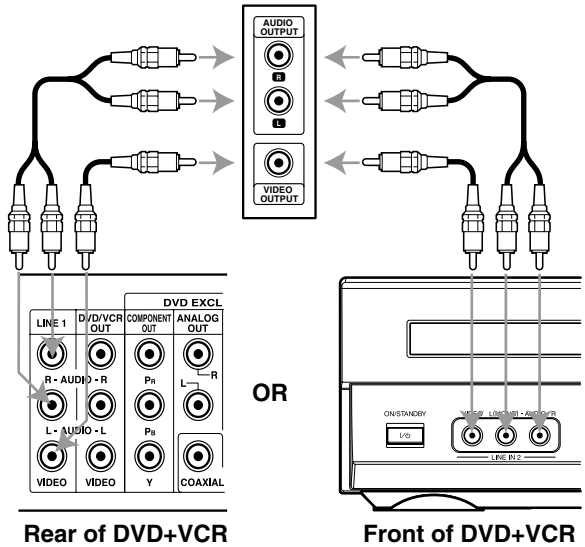
Accessory Audio/Video (A/V) Connections to DVD+VCR

Connect the VHS IN 1 or AV INPUT jacks on the DVD+VCR to the audio/video out jacks on your accessory component, using the optional audio/video cables.



Accessory Component:
VCR, Camcorder,
Video Camera,
Satellite Receiver,
Laser Disc Player

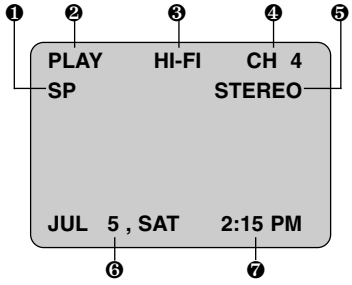
Jack panel of Accessory



Rear of DVD+VCR **Front of DVD+VCR**

On-Screen Display (OSD)

Some of these functions will be displayed every time the VCR is operated.



❶ TAPE SPEED DISPLAY
Shows the current tape speed.

❷ FUNCTION DISPLAY
Indicates the function in progress.

❸ HI-FI DISPLAY
Indicates when this unit is playing back tape recorded with Hi-Fi.

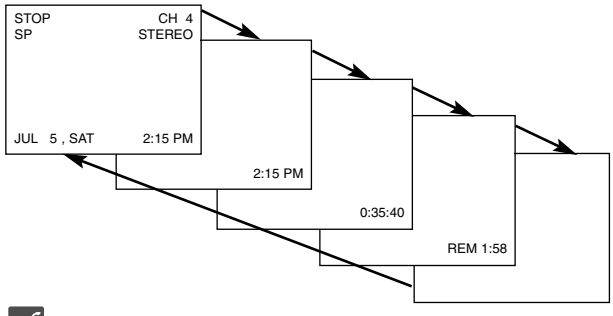
❹ CHANNEL DISPLAY
Indicates the selected channel (or LINE1, LINE2).

❺ STEREO/SAP DISPLAY (MONO is not displayed)
Shows the type of audio signal received by the VCR tuner.

❻ DATE DISPLAY
Shows the current date. (Month/Date/Day of the week format)

❼ CLOCK/COUNT/REMAIN DISPLAY
Shows the current time, the tape counter and remaining time on the tape.

Each press of the **ENTER** changes the TV screen in the following sequence.



Notes

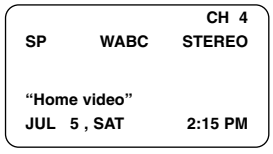
- The function displays can be seen displayed on the TV screen for 5 seconds.
- The clock (or tape counter, tape remaining) mode will continue until you press **ENTER**.
- The tape counter and the remaining tape length indicator appear only when a cassette is inserted. Also, the remaining tape length indicator appears after any tape operation.

Easy Information

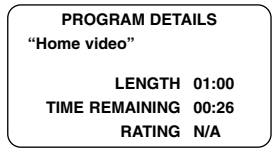
If the Extended Data Service (XDS) signals are provided along with normal TV signal in your area or during playback of a tape recorded with Extended Data Service (XDS) signals, the station ID, program title and program details are shown on the TV screen.
When viewing a channel with Extended Data Service (XDS) signals, press **ENTER** then the station ID will appear on the TV screen. Press **ENTER** again and the program details will appear on the TV screen.
When viewing a tape recorded with Extended Data Service (XDS) signals, press **ENTER** twice then the program title and program details will appear on the TV screen.

Program Details

LENGTH: Indicates the run length of a program.
TIME REMAINING: Indicates the remaining time of a program.
RATING: Indicates the rating of the current program (N/A, G, PG, PG-13, R, NC-17, X and Not Rated). The rating N/A means that the motion picture ratings are not applicable to this program.



Easy Information Screen (Station ID)



Easy Information Screen (Program details)

Setting the On-Screen Display

The SETUP, clock setting, and timer recordings are accessed conveniently with On-Screen Menu Displays that lead you through each step. The following pages describe the On-screen selections to be set.

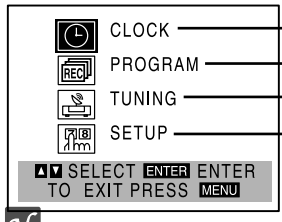
Menu Selection

Your VCR allows remote control adjustment of several features.

1 Press VCR MENU and the MAIN menu will appear.

2 Select the desired menu with ▲/▼ button and then press ENTER.

MAIN MENU



CLOCK SET (page 17)
PROGRAM (page 24)
TUNING (page 16)
SETUP (page 16)

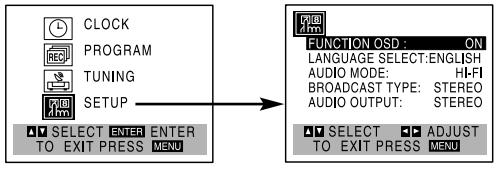
Note
Menus remain on-screen for 3 minutes.

3 Press VCR MENU when finished.

Setting the VCR Setup Menu

1 Press VCR MENU and the MAIN menu will appear.

2 Press ▲/▼ to select the SETUP menu, then press ENTER.
The SETUP menu will appear.



3 Press ▲/▼ to choose a desired option on the SETUP menu. Then press ◄/► to choose a desired setting.

FUNCTION OSD
The on-screen display of this DVD+VCR can be turned on or off.
- FUNCTION OSD can be switched between ON and OFF by pressing ◄/►.

LANGUAGE SELECT
The on-screen programming of this DVD+VCR can be displayed in either English, Spanish, or French.
- LANGUAGE SELECT can be switched among ENGLISH, SPANISH and FRENCH by pressing ◄/►.

AUDIO MODE
The DVD+VCR has two separate audio playback systems, the high quality VHS Hi-Fi system and standard NORMAL mono system. The same audio is generally recorded on both systems. The VHS Hi-Fi system plays on separate (left and right) channels, and the NORMAL system plays monaural sound. The normal track is always played so the cassette can be played on a DVD+VCR that does not have VHS Hi-Fi.
- AUDIO MODE can be switched between HI-FI and NORMAL by pressing ◄/►.

BROADCAST TYPE (STEREO/SAP/MONO)
Multichannel Television Sound (MTS) carries stereo and/or Second Audio Program (SAP) bilingual signals. Set this display to the desired position when both MTS stereo and SAP signals are received. When only one of the MTS signal is received, the DVD+VCR automatically selects the corresponding receiving mode (Stereo or SAP) regardless of the selected position. For normal operation, the display should be in the STEREO position. The DVD+VCR will then record a STEREO program when available, and record a mono program IF the program is NOT IN STEREO. For weak STEREO and/or SAP broadcasts, changing the display to mono may give clearer sound.
- BROADCAST TYPE can be switched among STEREO, SAP, and MONO by pressing ◄/►.

AUDIO OUTPUT (STEREO/LEFT/RIGHT)
Used during playback [when AUDIO MODE (HI-FI/NORMAL) is in HI-FI position] for selecting the audio output signals from the AUDIO OUT terminals (L ch and R ch), and RF.OUT.
This display setting should normally be left in the stereo position, so that when a stereo tape is played, the stereo sound will be heard through the left and right channels. If a mono tape is played and the audio output is set to stereo, the same mono sound will be heard from both left and right channels.
- AUDIO OUTPUT can be switched among STEREO, LEFT, and RIGHT by pressing ◄/►.

4 Press VCR MENU when finished.

Channel Selection

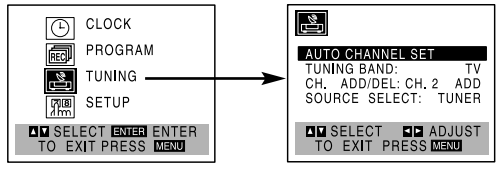
This DVD+VCR is equipped with a frequency synthesized tuner capable of receiving up to 181 channels. These include VHF channels 2-13, UHF channels 14-69 and CATV channels 1-125.

Preparation:
- Connect the DVD+VCR to the desired type of antenna or cable TV system, as shown in Connecting Antenna/Cable TV to DVD+VCR on page 11.

AUTO CHANNEL PROGRAMMING

1 Press VCR MENU and the MAIN menu will appear.

2 Press ▲/▼ to select the TUNING menu, then press ENTER.
The TUNING menu will appear.



3 Press ▼ to choose the SOURCE SELECT option, then press ◄/► to select TUNER.
Press ◄/► repeatedly to switch among TUNER, LINE1 and LINE2.

4 Press ▲/▼ to choose the AUTO CHANNEL SET option, then press ◄/► to set the channel.
The tuner will automatically cycle through all available channels in the area and place them in the tuner's memory.

5 After the AUTO CHANNEL SET PROCEEDING is complete, make sure the TUNING BAND is set appropriately (TV or CATV) by pressing ▲/▼ and choosing the correct TUNING BAND (TV or CATV) by pressing ◄/► using the TUNING menu.
Remember, TV is for the air antenna reception, CATV is for cable or wireless cable connection.

6 Press VCR MENU to return to the TV screen.

7 Use CH/TRK (+/-) or CHANNEL (▲/▼) on the front panel to cycle the DVD+VCR through the channels in memory.

TO ADD OR ERASE CHANNELS FROM MEMORY
This feature allows you to add or erase channels from memory manually.

1 Press ▼ to choose the CH. ADD/DEL option on the TUNING menu. Press ◄/► to select a channel to add or erase.

2 Press **ENTER** to add or erase the channel. Repeat steps 1 and 2 to add or erase channels.

3 Press **VCR MENU** to return to the TV screen.

Setting the Clock

The DVD+VCR gives you two ways to set the time and date: the Auto Clock Feature or manually. The Auto Clock Feature enables the DVD+VCR to set up the clock when the DVD+VCR is turned off.

Things to know before starting

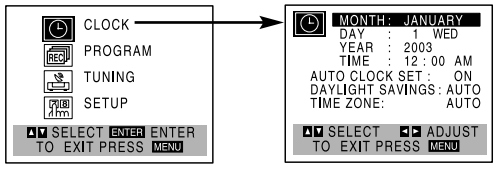
- The clock uses the 12-hour system. (Be sure to set AM and PM correctly.)
- The initial Clock Setting is **JANUARY 1, 2003, 12:00 AM**.

Auto Clock Set

The Auto Clock Set feature is set to ON at the factory. In the ON setting, the DVD+VCR looks for a channel carrying XDS (Extended Data Services) information. XDS updates the clock using the Coordinated Universal Time.
The Auto Clock Feature enables the DVD+VCR to set up the clock when the DVD+VCR is turned off.

1 **Press VCR MENU and the MAIN menu will appear.**

2 **Press ▲/▼ to choose the CLOCK menu.**
Press ENTER and the CLOCK menu will appear.



3 **Press ▼ to choose the AUTO CLOCK SET option.**
Press ◄/► to choose ON.
The Auto Clock Set feature is set to ON at the factory. In the ON setting, the DVD+VCR looks for a channel carrying XDS (Extended Data Services) information. XDS updates the clock using the Coordinated Universal Time.

4 **Press ▼ to choose the DAYLIGHT SAVINGS item.**
Press ◄/► to choose AUTO, ON or OFF.
If you choose AUTO, the VCR sets the clock using the DST information broadcast in the signal (channel).
If you choose ON, the VCR sets the clock when the Daylight Saving Time is started and ended.

5 **Press ▼ to choose the TIME ZONE item.**
Press ◄/► to choose the correct time zone (AUTO, EASTERN, CENTRAL, MOUNTAIN, PACIFIC, ALASKA or HAWAII).
If "AUTO" is selected as the time zone, the VCR sets the clock using the first Coordinated Universal Time information it finds in a broadcast signal.

6 **Press VCR MENU when finished.**

7 **Turn off the DVD+VCR and the auto clock setting works.**

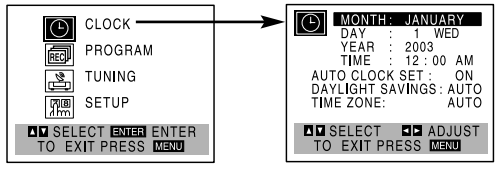
Note
There are cases where the TV station does not send or sends wrong date and/or time information and the DVD+VCR sets the incorrect time.
If this happens we recommend that you set the clock manually.

Manual Clock Set

Example: July 5, 2003 ; 2:15 AM

1 **Press VCR MENU and the MAIN menu will appear.**

2 **Press ▲/▼ to choose the CLOCK menu.**
Press ENTER and the CLOCK menu will appear.



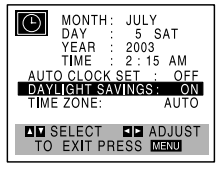
3 **Press ◄/► to choose the month.**

4 **Press ▼ to choose the DAY option.**
Use ◄/► to choose the day.
The day of the week will display automatically.

5 **Press ▼ to choose the YEAR option.**
Use ◄/► to choose the year.

6 **Press ▼ to choose the TIME option.**
Use ◄/► to choose the time.
Press and hold ◄/► to advance clock continuously.

7 **Press ▼ to choose the DAYLIGHT SAVINGS item.**
Use ◄/► to choose AUTO, ON or OFF.
If you choose AUTO, the VCR sets the clock using the DST information broadcast in the signal (channel).
If you choose ON, the VCR sets the clock when the Daylight Saving Time is started and ended.



8 **Press VCR MENU when finished.**

Note
If setting the clock manually, "AUTO CLOCK SET" must set to "OFF".
If set to "ON", an incorrect date and/or time will be entered again when the DVD+VCR is turned off.

General Explanation

This manual gives the basic instructions for operating the DVD+VCR. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol ⃠ appears on the TV screen, indicating that the operation is not permitted by the DVD+VCR or is not available on the disc.

On-Screen Display

The general playback status can be displayed on the TV screen. Some options can be changed on the menu.

On-screen display operation

1 **Press DISPLAY during playback.**

2 **Use ▲/▼ to select an option.**
The selected option will be highlighted.

3 **Use ◄/► to change the setting of an option.**
The number buttons can also be used for setting numbers (e.g., title number). For some functions, press ENTER to execute the setting.

Temporary Feedback Field Icons

- TITLE — Repeat Title
- CHAPT — Repeat Chapter
- TRACK — Repeat Track (non-PBC Video CDs and Audio CD only)
- ALL — Repeat Disc (non-PBC Video CDs and Audio CD only)
- A B — Repeat A-B
- OFF — Repeat Off
- ▮▮■ — Resume play from this point
- ⃠ — Action prohibited or not available

Notes

- Some discs may not provide all of the features on the on-screen display example shown below.
- If no button is pressed for 10 seconds, the on-screen display disappears.

DVD

Options		Function (Press ▲/▼ to select desired option)	Selection Method
Title Number	1/3	**Shows the current title number and total number of titles, and** skips to the desired title number.	◄/►, or Numeric, ENTER
Chapter Number	1/12	**Shows the current chapter number and total number of chapters, and** skips to the desired chapter number.	◄/►, or Numeric, ENTER
Time search	0:16:57	**Shows the elapsed playing time, and** searches the point by the elapsed time directly.	Numeric, ENTER
Audio language and Digital Audio Output mode	1 ENG DD 5.1 CH	**Shows the current audio soundtrack language, encoding method, and channel number, and** changes the setting.	◄/►, AUDIO
Subtitle language	OFF	**Shows the current subtitles language, and** changes the setting.	◄/►, SUBTITLE
Angle	1/1	**Shows the current angle number and total number of angles, and** changes the angle number.	◄/►, ANGLE
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◄/►

VCD2.0 **VCD1.1**

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Track Number	1/4	**Displays the current track number, total number of tracks and PBC On mode, and** skips to the desired track number.	◄ / ►, or Numbers, ENTER
Time	0:16:57	**Displays the elapsed playing time (Display only)**	–
Audio Channel	STER.	**Displays the audio channel, and** changes you make to the audio channel.	◄ / ►
Sound	NORM.	**Displays the current sound mode, and** any changes you make to the setting.	◄ / ►

Initial Settings

You can set your own Personal Preferences on the DVD+VCR.

General Operation

1 Press SETUP.
The setup menu appears.

2 Use ▲/▼ to select the desired option.
The screen will show the current setting for the selected option, as well as alternate setting(s).

3 While the desired option is selected, press ▶, then ▲/▼ to select the desired setting.

4 Press ENTER to confirm your selection.
Some options require additional steps.

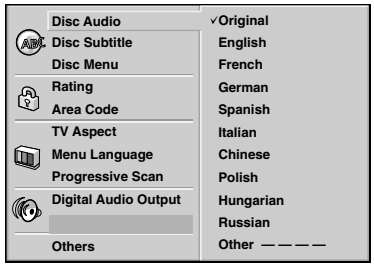
5 Press SETUP, RETURN, or PLAY to exit the setup menu.

Language

Disc Language DVD

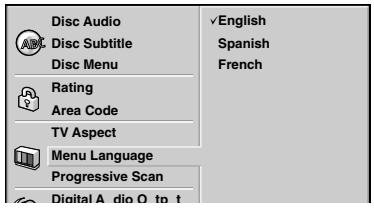
Select a language for the disc's Menu, Audio, and Subtitle.
Original : The original language set for the disc is selected.
Other : To select another language, press number buttons to enter the corresponding 4-digit number according to the language code list on page 42. If you enter the wrong language code, press CLEAR.

Notes
Disc Language selection may not work for some DVDs.



Menu Language

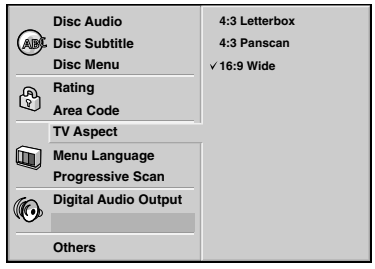
Select a language for the setup menu. This is the menu you see when you press SETUP.



Picture

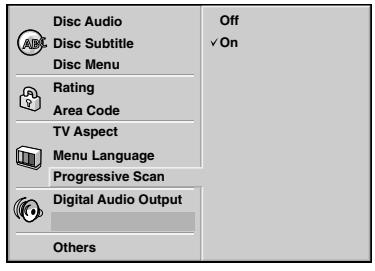
TV Aspect DVD

4:3 Letterbox: Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.
4:3 Panscan: Select when a standard 4:3 TV is connected. Displays pictures cropped to fill your TV screen. Both sides of the picture are cut off.
16:9 Wide: Select when a 16:9 wide TV is connected.



Progressive Scan DVD

Progressive Scan Video provides the highest resolution pictures with less flicker and line structure.
If you are using the COMPONENT VIDEO OUT jacks, but are connecting the DVD Player to a standard (analog) television, set Progressive Scan to Off.
If you are using the Component Video jacks for connection to a TV or monitor that is compatible with a progressive scan signal, set Progressive Scan to On.



Notes
– Progressive Scan is available only when the VIDEO OUTPUT switch on the rear panel is set to COMPONENT.

Caution
Once the setting for progressive scan output is entered, an image will only be visible on a progressive scan compatible TV or monitor. If you set Progressive Scan to On in error, you must reset the unit. Pointing the remote at the player, press the STOP key to stop any disc that is playing. Next, press the STOP key again and hold it for five seconds before releasing it. The video output will be restored to the standard setting, and a picture will once again be visible on a conventional analog TV or monitor.

Sound

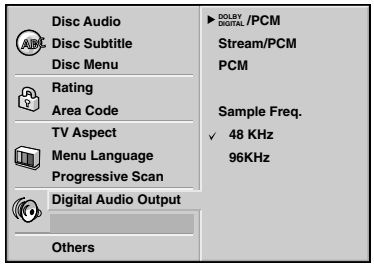
Digital Audio Output

Each DVD disc has a variety of audio output options. Set the DVD+VCR's Digital Audio Output according to the type of audio system you use.

DOLBY DIGITAL/PCM: Select DOLBY DIGITAL/PCM if you connected the DVD+VCR's DIGITAL AUDIO OUT jack to a Dolby Digital decoder (or an amplifier or other equipment with a Dolby Digital decoder).

Stream/PCM: Select Stream/PCM if you connected the DVD+VCR's DIGITAL AUDIO OUT jack to an amplifier or other equipment with a DTS decoder, Dolby Digital decoder or MPEG decoder.

PCM: Select when connected to a 2 channel digital stereo amplifier. The DVD+VCR output sounds in the PCM 2ch format when you play a DVD video disc recorded with a Dolby Digital, MPEG1, or MPEG2 recording system.



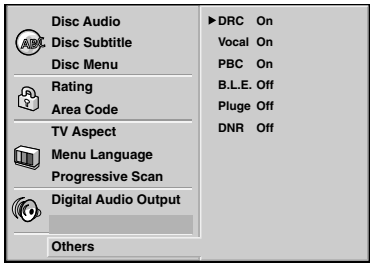
Sample Frequency

To change the Sample Frequency setting, first select the desired Digital Audio Output as indicated as above. If your receiver or amplifier is NOT capable of handling 96KHz signals, select 48KHz. When this choice is made, this unit will automatically convert any 96KHz signals to 48KHz so your system can decode them.
If your receiver or amplifier is capable of handling 96KHz signals, select 96KHz. When this choice is made, this unit will pass each type of signal through without any further processing.

Others

The DRC, Vocal, PBC, B.L.E., Pluge and DNR settings can be changed.

- Press ▲/▼ to select the desired item and press ENTER. The setting of the selected item alternates between On and Off.



Dynamic Range Control (DRC)

With the DVD format, you can hear a program's soundtrack in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). Then, you may listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

Vocal

Set Vocal to On only when a multi-channel karaoke DVD is playing. The karaoke channels on the disc will mix into normal stereo sound.

PBC

Set Playback Control (PBC) to On or Off.
On: Video CDs with PBC are played according to the PBC.
Off: Video CDs with PBC are played the same way as Audio CDs.

B.L.E. (Black Level Expansion)

To select the black level of playback pictures. Set your preference and monitor's ability.
On: Expanded grey scale. (0 IRE cut off)
Off: Standard grey scale. (7.5 IRE cut off)

Pluge (Blacker than Black)

For proper adjustment of your television brightness settings utilizing a commercially available test disc.
On: Select when you adjust the level of your TV using a commercially available test disc that contains pluge signals.
Off: For normal use.

DNR (Digital Noise Reduction)

You can reduce ambient noise in the picture.
DNR1: Normal level
DNR2: Expanded level.
Off: Off.

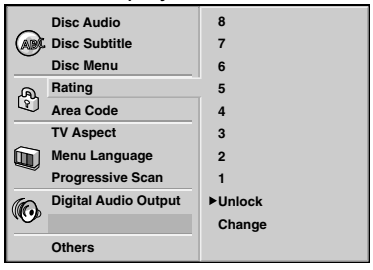
Notes

– Actual picture enhancement may vary depending on the quality of the disc.
– While the DNR2 (expanded level) can provide additional improvement in the reduction of noise in the video signal, it may produce undesirable picture artifacts on some discs. Should this occur, select a more appropriate DNR level (normal or off).
– Depending on the disc, some picture detail may be lost by the picture enhancement.
– A DVD audio disc with Dolby Digital or DTS soundtrack may be played, some DVD audio discs include moving pictures which may be modified by the above processes.

Parental Control

Rating DVD

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.



1 **Select Rating on the Setup menu using ▲/▼ buttons.**

2 **While Rating is selected, press ▶.**

3 **When you have not entered a password yet.**
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password, then press ENTER. Enter the 4-digit password again and press ENTER to verify.
When you have already entered a password;
Enter a 4-digit password using the numerical buttons to confirm the personal 4-digit security password, then press ENTER.

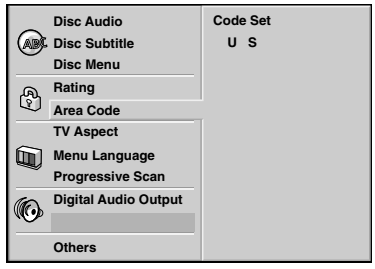
If you make a mistake before pressing ENTER, press CLEAR and enter 4-digit security password again.

4 **Select a rating from 1 to 8 using ▲/▼ buttons.**
Level 1 : DVD software for adults cannot be played back.
Level 8 : All DVD software can be played back.
The limitation will be more severe as the level number is lower.
Unlock: *If you select Unlock, Parental Control is not active. The disc will play in full.*
Ratings 1 to 8: *Some discs contain scenes not suitable for children. If you set a rating for the DVD+VCR, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.*

5 **Press ENTER to confirm your rating selection, then press SETUP to exit the menu.**

Area Code DVD

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See "Country/Area Code List", page 43.).



1 **Select Area Code using the ▲/▼ buttons on the setup menu.**

2 **While Area Code is selected, press ▶.**

3 **Follow step 3 of "Rating" on left.**

4 **Select the first character using the ▲/▼ buttons.**

5 **Press ▶ to shift to second character and select the second character using ▲/▼ buttons.**

6 **Press ENTER to confirm your Area code selection, then press SETUP to exit the menu.**

Note
Confirmation of the 4-digit password is necessary when the password is changed (see Changing the 4-digit password below).

Changing the 4-digit password

1 Follow Steps 1-2 as shown above to the left (Rating).
2 Enter the old password, then press ENTER.
3 Select Change using ▲/▼ buttons then press ENTER.
4 Enter the new 4-digit password, then press ENTER.
5 Enter exactly the same password a second time and verify by pressing ENTER.
6 Press SETUP to exit the menu.

If you forget your 4-digit password

If you forget your password, clear the current password by following the procedure below.

1 Press SETUP to display the setup menu.
Move the cursor down to "Rating".
2 Use the Number buttons to enter "210499". The cursor will move up to "Disc Audio" automatically.
The 4-digit password is cleared.
3 Enter a new password as shown above to the left (Rating).

Normal Playback

Preparation:
- Turn on the TV.
- Tune the TV to the DVD+VCR output channel (CH 3 or 4) or set the TV's source selector to VIDEO.
- If a direct VIDEO/AUDIO connection is made between the DVD+VCR and the TV, set the TV's source selector to VIDEO.
- Set the Output Source to VCR as shown in Setting the Output Source on page 6.

1 Insert a prerecorded video cassette.
The ⊂⊃ indicator will light and the DVD+VCR will power-up automatically.
- Make sure that the TIMER indicator in the display window is not lighted. If it is, press **POWER** once.
- If a tape without a safety tab is inserted, the unit will start playback automatically.

2 Press PLAY once.
PLAY appears on the TV screen .
- It is not necessary to select the tape speed for playback. It will be automatically selected by the DVD+VCR.
- In playback, the **TV/VCR** selector switches to VCR mode automatically.

3 Press STOP to stop playback.
STOP appears on the TV screen.
- If the tape reaches the end before STOP is pressed, the DVD+VCR will automatically stop, rewind, eject, and it will turn itself off.

Tracking Control

Auto Tracking
The automatic tracking function adjusts the picture to remove snow or streaks.
The AUTO TRACKING function works in the following cases:
- When the AUTO TRK button is pressed.
- A tape is played back for the first time.
- Tape speed (SP, LP, SLP) changes.
- Streaks or snow appear because of scratches on the tape.

Manual Tracking
If noise appears on the screen during playback, press either **CH/TRK (+/-)** on the remote control or **CHANNEL (▲/▼)** on the front panel until the noise on the screen is reduced.
- In case of vertical jitter, adjust these controls very carefully.
- Tracking is automatically reset to normal when the tape is ejected or the power cord is unplugged for more than 3 seconds.

Special Effect Playbacks

Special effects playback notes
- Horizontal lines (noise bars) will appear on the TV screen. This is normal.
- The audio is automatically muted during special effect modes, so there is no sound during search.
- During the high-speed picture search modes, a short period is needed to stabilize tape speed when re-entering the PLAY mode. Slight interference may be observed during this period.

Search

This function lets you quickly and visually search for a desired tape section in either direction: forward and reverse.

1 Press REW or FWD during playback.
The DVD+VCR will be activated in the SEARCH mode.
- If the DVD+VCR is left in the SEARCH mode for more than 3 minutes, the DVD+VCR will automatically enter the PLAY mode, to protect the tape and video heads.

2 To return to playback, press PLAY.

Still Picture and Frame-by-Frame Playback

1 Press PAUSE/STILL during playback.
Still picture will appear on the TV screen.
- If a still picture vibrates vertically, stabilize it by pressing CH/TRK (+/-) on the remote control.
- If the DVD+VCR is left in the STILL mode for more than 5 minutes, the DVD+VCR will automatically enter the STOP mode to protect the tape and video heads.

2 Press PAUSE/STILL repeatedly to advance the video picture one frame at a time while viewing a still picture.

3 To return to playback, press PLAY.

Slow Motion

1 Press SLOW during playback or still mode.
The tape will be played back at a speed 1/19 times slower than the normal speed.
- During slow playback, use CH/TRK (+/-) on the Remote Control to minimize noise bands.
- If slow motion mode continues for more than 3 minutes, the DVD+VCR will automatically change to playback mode.

2 To return to playback, press PLAY.

Instant Skip

This is useful for skipping commercials or short program segments.

1 Press INSTANT SKIP during the playback mode.
The tape will fast forward picture search through 30 seconds of recording.
- The skipping time can be extended by pressing INSTANT SKIP.
- Subsequent presses result in advancing the fast forward picture search time by 30-second increments (maximum 3 minutes).

2 When the search is completed, the DVD+VCR will go into playback mode automatically.

VISS (VHS Index Search System)

The VHS INDEX SEARCH SYSTEM enables you to locate the beginning of any recording made on this VCR. Whenever a recording begins, an invisible INDEX mark is recorded on the tape.

VISS Scan

VISS SCAN lets you search out each VISS mark on the recorded tape and play 5 seconds before advancing to the next VISS mark.

1 Insert a cassette tape that has VISS signals marked.

2 Press the VISS button once during PLAYBACK or STOP mode.
The VISS -- indicator will appear in the display window.

3 Press either the FWD or the REW button.
The VISS SCAN will start. The indicator appears simultaneously during scanning. The tape will be rewound or rapidly advanced to the next signal marked.
The tape will be played back for approximately 5 seconds, and then rewound or rapidly advanced to the next VISS signal.
- Press VISS or STOP button to stop the VISS SCAN mode.

4 At the desired program, press the PLAY button.
Normal playback of that program will begin.

VISS Search

You can locate the desired program and play it back automatically by designating the number of its VISS signal. Up to the 99th VISS signal from the preset position on the tape can be located.

1 Press the VISS button once during PLAYBACK or STOP mode.
The VISS -- indicator will appear in the display window.

2 Enter the number of VISS signals you wish to skip.
Up to 99 signals may be skipped from any given position on the tape.

3 Press either the FWD or REW button once.
The SrCH 02 (for example) message appears in the display window. When the desired VISS signal is found, playback begins automatically.
- If the end of the tape is reached during forward VISS search, the VCR will automatically stop, rewind, eject, and turn itself off.

Normal Recording

Preparation:
- Turn on the power of both the DVD+VCR and TV.
- Tune the TV to the DVD+VCR output channel (CH 3 or 4) or set the TV's source selector to VIDEO.
- If a direct VIDEO/AUDIO connection is made between the DVD+VCR and the TV, set the TV's source selector to VIDEO.

1 Insert a video cassette that the safety tab intact.

2 Select the desired channel by using CH/TRK (+/-).
- If you are recording from another source via audio/video input jacks (at the Rear or Front panel), select the LINE1 or LINE2 by pressing **INPUT SELECT**.

3 Set the desired recording speed (SP or SLP) by pressing SP/SLP.
- This DVD+VCR is not designed to record in LP mode.

4 Set the MTS mode as desired (See page 17, 27).

5 Press REC/OTR once.
Recording will start. (The REC indicator will light in the display window.)
- REC indicator appears only when the Output Source is set to VCR.
- If a cassette with no safety tab is loaded, the cassette will be ejected automatically.

6 Press STOP to stop recording.
If the tape reaches the end before STOP is pressed, the DVD+VCR will automatically stop, rewind, eject, and it will turn itself off.

To pause the recording

1 Press PAUSE/STILL to pause the tape during recording.
The REC indicator will flash in the display window.

2 When you want to continue recording, press PAUSE/STILL or press REC/OTR.
- After 5 minutes in pause mode, the tape will be stopped automatically to protect the tape and the video heads.

To record one TV program while watching another

1 Press TV/VCR to select the TV mode during recording.
The VCR indicator disappears.

2 Using the TV, select the channel to be viewed.

Tips

Always use PAUSE/STILL for best results when making changes during recording.
For example: To change channels during recording, first press PAUSE/STILL to put the unit in pause mode. Then select the desired channel on the DVD+VCR, and press PAUSE/STILL again to resume recording.

Timer Recording

This DVD+VCR can be programmed to record up to 8 programs within a period of 1 year. For unattended recording, the timer needs to know the channels to be recorded and the starting and ending times.

Things to know before starting

- If you try to set the program timer before setting the clock, PLEASE SET THE CLOCK appears for a moment and then CLOCK menu appears on the TV screen. Set the time and date before proceeding.
- Make sure a tape is in the DVD+VCR and the safety tab is in place or the tape will be automatically ejected.

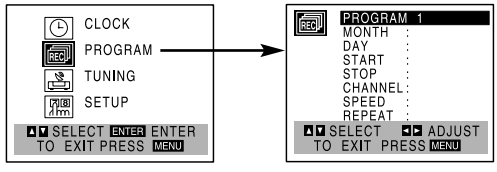
Preparation:

- Turn on the power of both the DVD+VCR and the TV.
- Be sure the TV is set to the DVD+VCR output channel (3 or 4).
- Make sure the TUNING BAND in the TUNING menu is set appropriately (TV or CATV).

1 **Press VCR MENU and the MAIN menu will appear.**

2 **Use ▲/▼ to choose the PROGRAM menu.**

3 **Press ENTER to go to the PROGRAM menu.**
The PROGRAM menu will appear.
- If all programs have already been entered, FULLY PROGRAMMED message will appear for a moment and then PROGRAM 1 will appear on the TV screen.



4 **Use ◄/► to choose the PROGRAM No. (1-8).**

5 **Use ▼ to choose the MONTH option.**
Use ◄/► to choose the desired month.

6 **Use ▼ to choose the DAY option.**
Use ◄/► to choose the desired day.

7 **Use ▼ to choose the START option.**
Use ◄/► to choose the desired start time.
Press and hold ◄/► to advance the clock faster.

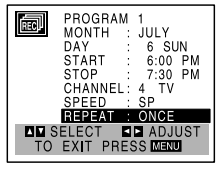
8 **Use ▼ to choose the STOP option.**
Use ◄/► to choose the desired stop time.
Press and hold ◄/► to advance the clock faster.

9 **Use ▼ to choose the CHANNEL option.**
Use ◄/► to choose the desired channel (Channel, LINE1 or LINE2).

Cable Users: If you have CABLE TV and used Cable Box in Connecting Antenna/Cable TV to DVD+VCR (page 11), using a cable box converter, you must set the channel in this step to match the cable box output channel (usually CH 3 or 4). Change channels on the cable box instead of with the DVD+VCR.

10 **Use ▼ to choose the SPEED option.**
Use ◄/► to choose the desired recording speed (AUTO, SP or SLP).
- AUTO mode determines how much tape is left and switches speed from SP to SLP, if necessary, to complete recording the program. There will be some picture and sound distortion at the point of the speed change.

11 **Use ▼ to choose the REPEAT option.**
Use ◄/► to choose the desired repeat (ONCE, WEEKLY or DAILY).
ONCE event....for recording up to 8 programs on a single day or over the days within a period of 1 year.
WEEKLY event....for recording up to 8 programs on a certain day of every week.
DAILY event....for recording up to 8 programs at the same time(s) Monday through Friday.



Tip

If the input data is wrong, use ▲ to select the data and correct it using ◄/►.

12 **Press VCR MENU, the program will be memorized at the DVD+VCR.**
- TIMER indicator lights in the display window.
- If the program preset time is past, the PAST TIME PROGRAMMED message will appear on the TV screen. Return to the incorrect program and program it with the correct time.
- If you had entered a past date, the timer recording will be performed on that date of the next year.
- Additional programs may be entered by repeating steps **1-12**.

Cable Users: If your cable hookup is via a TV converter box, you can program multiple recordings only on the converter box output channel. This is because the converter determines what channel you view through your DVD+VCR.

Tip

If you have finished programming and you want to set the DVD+VCR to record the programs you have entered.
MAKE SURE YOU HAVE INSERTED A TAPE INTO THE DVD+VCR. The DVD+VCR is now set to record the preset programs.

Note

If the power fails or the DVD+VCR is unplugged from the AC outlet, the correct clock time and timer settings are kept in memory for approximately 3 seconds. After 3 seconds, the clock and program timer must be reset when power is restored. Reset the clock according to instructions.

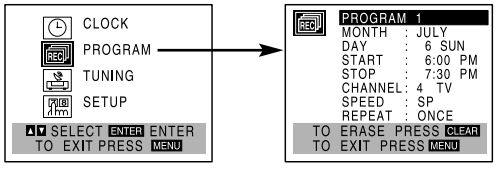
After setting a timer recording, it will start if a timer recording passes over the start time when stopping the playback or recording.

Checking (Erasing) the Timer Program

Programming can be checked whenever the DVD+VCR is turned on.

1 Press VCR MENU and the MAIN menu will appear.

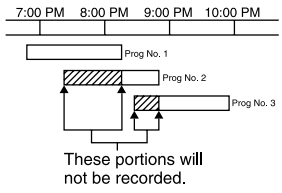
2 Use ▲/▼ to choose the PROGRAM menu.
Press ENTER and the PROGRAM menu will appear.



3 Use ◄/► to select a program you want to check or erase. If you want to erase the program, press CLEAR.

4 Press VCR MENU to return to the TV screen.

Program Priority



If the recording start and end times of preset programs overlap on the same day (see the example and diagram left), program number 2 will not be recorded until program number 1 is finished.

The first part of program number 2 will not be recorded. The same thing will happen to program number 3.

One touch Timer Recording(OTR)

One touch Timer Recording allows you to make a recording easily of a preset length without using the program timer.

Preparation:

- Turn on the power of both the DVD+VCR and the TV.
- Be sure the TV is tuned to the DVD+VCR output channel (3 or 4).
- If a direct VIDEO/AUDIO connection is made between the DVD+VCR and the TV, set the TV's source selector to VIDEO.

1 Insert a video cassette with the safety tab intact.

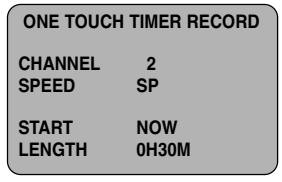
2 Select the desired channel by using CH/TRK (+/-) or number (0-9).
The channel number appears on the TV screen.
- If you are recording from another source via audio/video input jacks (at the Rear or Front panel), select the LINE1 or LINE2.

3 Set the desired recording speed (SP or SLP) by pressing SP/SLP.
The tape speed will appear on the TV screen.

4 Press REC/OTR twice.
The menu as illustrated, will appear on the TV screen.
- Recording will start. (The TIMER indicator will light)

5 Press REC/OTR repeatedly to select the recording time length.
At the end of the recording, the DVD+VCR will stop recording and shut off.
- During One touch Timer Recording, changing the channel on the DVD+VCR will not be possible.
- You can stop the recording by pressing STOP.

ONE TOUCH TIMER RECORD MENU



0H30M ..... 9H00M → 0H00M

Length Display (each additional press of REC/OTR increases recording time 30 minutes)

Checking the Recording Time

Press REC/OTR once to check the recording time. The recalled setting will automatically return to the TV screen after 6 seconds.

To extend the Recording Time

The recording time can be extended anytime by pressing REC/OTR.
Subsequent presses result in advancing the recording time by 30-minute increments to a maximum fo 9 hours.

Notes

- If you press PAUSE/STILL during One touch timer recording, the DVD+VCR will enter the recording pause mode. Instant timer recording is cancelled.
- If the DVD+VCR is set to "0H00M", the DVD+VCR goes to normal recording mode.

Dubbing and Editing

If you wish to edit or dub your camcorder (or another VCR) recordings to this DVD+VCR, the rear (or Front) panel mounted Audio and Video (A/V) input jacks make the connections quick and easy. These direct A/V jacks will also provide better picture results than using the RF jack on the rear panel.

1 Connect the camcorder's (or another VCR's) A/V outputs to your DVD+VCR as illustrated on page 14.

2 Set the input channel "LINE2". (press INPUT SELECT to select LINE2.)

- If you have connected your DVD+VCR to the A/V input jacks on the rear of DVD+VCR, you should select the input channel LINE1 by pressing **INPUT SELECT** twice.

3 Play the tape in the camcorder (or another VCR). If you have a TV attached to your DVD+VCR, you can see the video playing.

4 When your desire recording begins, press DVD+VCR's REC/OTR once to start.

Note

Before recording, please confirm the recording start position.

Copying from DVD to VCR

This unit allows you to copy the contents of a DVD to a VHS tape.

Note

If the DVD you are attempting to copy is copy protected, you will not be able to copy the disc. It is not permitted to copy Macrovision encoded DVDs. "Lock" is displayed in the display window.

1 Insert Disc

Insert the disc you wish to copy in the DVD deck and close the disc tray.

2 Insert VHS Tape

Insert a blank VHS video tape into the VCR deck.

3 Press PLAY on the DVD deck.

The DVD will go into play mode

- If the DVD disc menu appears, you may need to press the PLAY manually to begin copying.

4 Press REC on the VCR deck.

- The DVD+VCR will go into Record mode.
- "CDREC" indicator will light.

5 Stop the Copy Process

When the DVD is finished playing, press the VCR on the remote control and then press STOP (■) to end the copy. You must stop the Copy process manually when the DVD movie ends, or the unit may replay and record over and over again.

Note

When you stop the DVD playback during copying, the recording on VCR is stopped automatically.

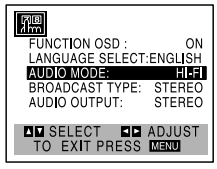
VHS Hi-Fi Stereo System/ MTS Broadcast

This DVD+VCR is equipped with the VHS Hi-Fi audio sound system for recording and playback. The information below gives a brief description of Hi-Fi audio and how to record and play a tape in the Hi-Fi audio mode.

Playback with Hi-Fi Stereo Audio Sound

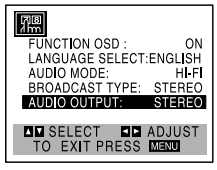
A stereo TV with AUDIO/VIDEO input jacks or a stereo audio system is required for true stereo playback. To experience the full and rich stereo sound available with Hi-Fi recorded tapes, we recommend the connection of this unit to a home stereo audio system.

1 Set the AUDIO MODE option to HI-FI on the SETUP menu .



2 Set the AUDIO OUTPUT option to STEREO position.

(STEREO) POSITION: The left channel sound (L) is heard from the left speaker and the right channel sound (R) is heard from the right speaker.
(LEFT) POSITION: The left channel sound (L) is heard from both speakers.
(RIGHT) POSITION: The right channel sound (R) is heard from both speakers.



3 Press VCR MENU.

4 Insert a cassette and press PLAY.
Adjust volume at your stereo system.

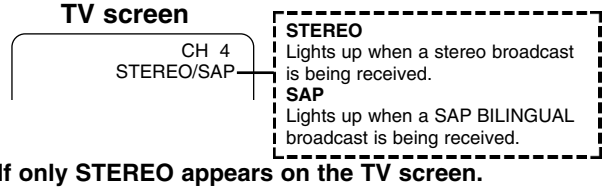
MTS (Multi-Channel TV Sound)

This DVD+VCR will decode MTS stereo and bilingual (SAP) off-the-air broadcast sound signals. It also decodes stereo TV sound from local cable companies, as long as they operate on assigned cable frequencies and use the EIA-recommended MTS stereo/bilingual TV sound system.

Multichannel TV Sound Indicator (MTS)

Shows Onscreen as illustrated below when **ENTER** is pressed.

- One or both of the indicators will light, depending on the MTS broadcast.



If only STEREO appears on the TV screen.
The DVD+VCR can record in stereo onto the VHS Hi-Fi audio tracks when the BROADCAST TYPE option is in the STEREO position. The DVD+VCR will also record mono audio onto the mono audio track.

If only SAP appears on the TV screen.
Set the BROADCAST TYPE option to SAP.

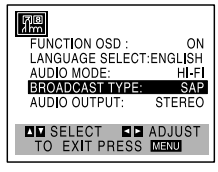
If STEREO/SAP appears on the TV screen
Use the BROADCAST TYPE option to select the desired recording mode (STEREO or SAP).

SAP (Second Audio Program) Recording

Some stations transmit a Second Audio Program, which is used for a second language or additional information. When the station broadcasts a Second Audio Program, follow the procedure below to record the SAP.

1 Insert a video cassette with the safety tab intact.

2 Set the BROADCAST TYPE option to SAP (SETUP menu).
Do this if only the SAP appears on the TV screen or you know the program will use the SAP.



3 Press VCR MENU.

4 Set the desired recording speed (SP or SLP) by pressing SP/SLP.

5 Select the desired channel. The SAP should appear on the TV screen.

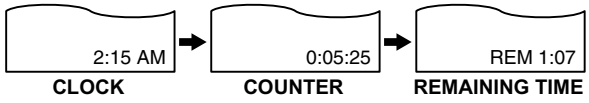
6 Press REC/OTR once
You are now recording the program you see and hear on the TV.

7 Press STOP to stop recording.

Tape Counter Memory Feature

Real-Time Counter

Shows length of tape run in hours, minutes, and seconds. Press **CLK/CNT** to select the real-time counter display.
Every press of **CLK/CNT** changes the TV screen as illustrated below.



- Counter changes to "0:00:00" when the cassette is ejected.
- The real-time counter does not operate if nothing is recorded on the tape.
- The real-time counter will not work unless a tape is inserted.

Counter Memory Function

This is useful if there is a section of tape you want to view immediately after recording or if you want to return to the same point several times.

1. **Begin recording or playing a tape.**
2. **Press CLK/CNT repeatedly to display the real-time counter appears on the TV screen.**
3. **At the point that you want locate later, reset the real-time counter to "0:00:00" by pressing COUNTER RESET.**
4. **Continue to play or record.**
5. **Press STOP when recording or playback finishes.**
6. **Press REW.**
   The tape automatically stops when the tape counter returns to about "0:00:00".

Tape Remaining

This function allows the time of the remaining tape to be displayed during recording or playback.
Press **CLK/CNT** until the REM indicator displays on the TV screen during recording or playback.

Note

The remaining tape length indicator may not be displayed correctly depending on the condition of the tape and the kind of the tape (T-140, T-160, or T-210 etc)

Additional Information

- In manual recording, Timer recording, One-touch Timer Recording, playback, or fast forward modes, the DVD+VCR automatically starts rewinding the tape at the end of the tape. The cassette will stop at the beginning of the tape and be ejected, and the DVD+VCR will turn itself off.
- After you have finished using the DVD+VCR, rewind, eject, and remove the cassette. Place the cassette in its protective sleeve to protect it from dust. It is not necessary to rewind the cassette before removing it, but if you do, it will be ready to play or record the next time you use it.
- Be sure the DVD+VCR Channel Selector is on the correct channel you wish to record. The channel that is being recorded can always be checked by setting the television on the DVD+VCR channel (3 or 4) and pressing the **TV/VCR** selector to turn the DVD+VCR's VCR indicator on.
- Do not attempt to hook up more than one television set to the DVD+VCR for either recording or playback.

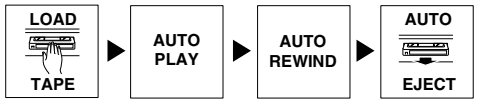
S-VHS Quasi Playback (SQPB)

- This DVD+VCR can also play back a tape which is recorded in S-VHS playback picture.
- This DVD+VCR cannot record in S-VHS format
- SQPB is an abbreviation for S-VHS Quasi Playback.

Auto Play System

This DVD+VCR features automatic playback.
Load a cassette (with the safety tab removed).

- The Output Source is changed to VCR mode automattically.
- The power turns on automatically and playback begins.
- At the end of the tape, the DVD+VCR stops, then rewinds.
- The cassette is ejected after rewinding and goto standby.



Video Head Cleaning

- Whenever a video cassette is inserted into or ejected from this unit the video head is automatically cleaned.
- However, it is possible that the heads may become clogged when playing an old or damaged tape. If the image on your screen resembles the picture on the left while playing back a tape, the heads may require cleaning.
- To clean the heads, obtain a head cleaning tape from your local video dealer. Follows the instructions that come with the cleaning tape, as excessive use can shorten head life.

Blank Search

The Blank Search enables you to locate the end of any recording. Whenever a recording creates, a blank content is recorded on the tape.
Press BLANK SEARCH during playback or in the stop mode and rapidly advanced to find blank content.
To find next blank content, press BLANK SEARCH again.

Playing DVD and Video CD

Playback Setup DVD VCD2.0 VCD1.1

- Turn on the TV and select the video input source connected to the DVD+VCR.
- Audio system: Turn on the audio system and select the input source connected to the DVD+VCR.
- Set the Output Source to DVD as shown in Setting the Output Source on page 6.

1 Press OPEN/CLOSE to open the disc tray.

2 Load your chosen disc in the tray, with the label facing up.
When a double-sided DVD is inserted, make sure the side you want to play is facing down.

3 Press OPEN/CLOSE to close the tray.
"dISC LOAD" appears in the display window, and playback starts automatically.
If playback does not start, press PLAY.
In some cases, the disc menu might appear instead.
For some VCD discs, it might take 5 or 6 secs after pressing PLAY before the playback picture appears.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD that contains a menu.

DVD

Use ◀/▶/▲/▼ buttons to select the title/chapter you want to view, then press ENTER to start playback. Press TOP MENU or MENU to return to the menu screen.

VCD2.0

- Use the number buttons to select the track you want to view.
  Press RETURN to return to the disc menu screen.
- Menu setting and the exact operating procedures for using the disc menu may differ depending on the disc. Follow the instructions on each menu screen.
  You also may set PBC to Off under setup. See page 20.

Notes

- If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit password must be entered and/or the disc must be authorized (see Parental Control, on page 21).
- DVDs may have a region code.
- Your DVD+VCR will not play discs that have a region code different from your DVD+VCR. The region code for this DVD+VCR is 1 (one).
- Do not keep an image or on-screen displayed for a long time.

General Features

Note

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD

When a disc has more than one title, you can move to another title as follows:

- Press DISPLAY when playback is stopped, then press the appropriate numbered button (0-9) then press ENTER to select a title number.

Moving to another CHAPTER/TRACK

DVD VCD1.1

When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:

- Press SKIP (⏮) or SKIP (⏭) briefly during playback to return to the beginning of the current chapter/track or to select the next chapter/track.
- Press SKIP (⏮) twice in quick successions to step back to the previous chapter/track.
- To go directly to any chapter/track during playback, press DISPLAY. Then, press ▲/▼ to select C (chapter) (or for a Video CD, select T for track). Then, enter the chapter number using the numbered buttons (0-9).
- For two-digit numbers, press the buttons in rapid succession.

Slow Motion DVD VCD2.0 VCD1.1

1 Press PAUSE/STEP during playback.
The DVD+VCR will now go into PAUSE mode.
2 Press SKIP (⏮) or SKIP (⏭) during pause mode.
The DVD+VCR will enter SLOW mode.
3 Use SKIP (⏮) or SKIP (⏭) to select the required speed: ◀❙ 1/16, ◀❙ 1/8, ◀❙ 1/4 or ◀❙ 1/2 (backward), or ❙▶ 1/16, ❙▶ 1/8, ❙▶ 1/4 or ❙▶ 1/2 (forward).
4 To return to playback, press PLAY.

Note

Slow motion playback in reverse is not available from a Video CD.

General Features (continued)

Still Picture and Frame-by-frame playback

DVD VCD2.0 VCD1.1

1 Press PAUSE/STEP during playback.
The DVD+VCR will now go into PAUSE mode.
2 With a DVD, you can advance the picture frame by frame by pressing PAUSE/STEP repeatedly on the remote control.
3 To return to playback, press PLAY.

Search DVD VCD2.0 VCD1.1

1 Press REW or FWD for about two seconds during playback.
The DVD+VCR will now go into SEARCH mode.
2 Press REW or FWD repeatedly to select the required speed: ◄◄X2, ◄◄X4, ◄◄X16, ◄◄X100 (backward) or ►►X2, ►►X4, ►►X16, ►►X100 (forward).
With a Video CD, the Search speed changes: ◄◄X2, ◄◄X4, ◄◄X8 (backward) or ►►X2, ►►X4, ►►X8 (forward).
3 To return to playback, press PLAY.

Random Karaoke DVD VCD1.1

1 Press RANDOM during playback or in stop mode. The unit automatically begins Random Playback and "RANDOM" appears on the TV screen.
2 To return to normal playback, press RANDOM until "NORMAL" appears on the TV screen.

Tips

By pressing SKIP (I◄◄) or SKIP (►►I) during Random playback, the unit selects another title (track) and resumes Random playback.

Note

This function only works with DVD Karaoke discs and video CD without PBC.

Time Search DVD

The Time Search function allows you to start playing at any chosen time on the disc.

1 Press DISPLAY during playback. The on-screen display appears on the screen.
The Time Search box shows the elapsed playing time of the current disc.
2 Within 10 seconds, use ▲/▼ to select the Time Search icon in the on-screen display.
The "-:--:--" appears in the Time Search box.
3 Within 10 seconds, use the numbered buttons to enter the required start time. Enter hours, minutes and seconds from left to right in the box.
If you enter the wrong numbers, press CLEAR to remove the numbers you entered. Then enter the correct numbers.
4 Within 10 seconds, press ENTER.
Playback starts from the selected time on the disc. If you enter an invalid time, playback will continue from the current point.

Selecting the sound enhancement

DVD VCD2.0 VCD1.1

1 Press DISPLAY during playback.
2 Use ▲/▼ to select the sound icon.
The sound option will be highlighted.
3 Use ◄/► to select "NORM", "3D SUR" or "DIALOGUE".

NORM. : Normal sound
3D SUR: This player can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.
DIALOGUE: Enhances critical center channel information to make dialogue more intelligible (only when playing a DVD video disc recorded on the Dolby Digital recording system).
- To use this enhancement on audio output from the DIGITAL AUDIO OUT jack, be sure to set "Digital Audio Output" to "PCM". See page 20.

Repeat DVD VCD2.0 VCD1.1

DVD Video Discs - Repeat Chapter/Title/Off

1 To repeat the currently playing chapter, press REPEAT.
The Repeat Chapter icon appears on the TV screen.
2 To repeat the title currently playing, press REPEAT a second time.
The Repeat Title icon appears on the TV screen.
3 To exit Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

Video CDs - Repeat Track/All/Off

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the TV screen.
2 To repeat the disc currently playing, press REPEAT two times.
The Repeat All icon appears on the TV screen.
3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the TV screen.

Note

- On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Repeat function.
See page 20.
- If you press SKIP (⏮) twice or SKIP (⏭) during Repeat Chapter/Track playback, the repeat playback cancels.

Repeat A-B DVD VCD2.0 VCD1.1

To repeat a sequence in a title:

1 Press A-B at your chosen starting point.
A- appears briefly on the TV screen.
2 Press A-B again at your chosen end point.
A-B appears briefly on the TV screen, and the repeat sequence begins
3 To cancel the sequence, press A-B.

Zoom DVD VCD2.0 VCD1.1

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

1 Press ZOOM during playback or still playback to activate the Zoom function.
If you press ZOOM repeatedly, the magnification level increases up to six steps.
2 Use ◀/▶/▲/▼ buttons to move through the zoomed picture.
3 Press CLEAR to resume normal playback or return to the paused image.

Note

- The zoom function may not work for some DVDs.
- The zoom function may not work on multi-angle scenes.

Marker Search DVD VCD2.0 VCD1.1

You can start playback from a memorized point. Up to nine points can be memorized.
To enter a mark, follow these steps.

1 During disc playback, press MARKER when playback reaches the spot that you want to memorize.
The Marker icon will appear on the TV screen briefly.
2 Repeat step 1 to enter up to nine Marker points on a disc.

To Recall a Marked Scene

1 During disc playback, press SEARCH.
The Marker Search menu will appear on the screen.
2 Within 10 seconds, press ◀/▶ to select a Marker number that you want to recall.
3 Press ENTER.
Playback will start from the Marked scene.
4 To remove the MARKER SEARCH menu, press SEARCH.

To clear a Marked Scene

1 During disc playback, press SEARCH.
The Marker Search menu will appear on the screen.
2 Within 10 seconds, press ◀/▶ to select a Marker number that you want to erase.
3 Press CLEAR.
The Marker number will be erased from the list.
4 Repeat steps 2 and 3 to erase additional Marker numbers.
5 To remove the MARKER SEARCH menu, press SEARCH.

Special DVD Features

Checking the contents of DVD Video discs: Menus

DVDs may contain menus that allow you to access special features. To use the disc menu, press MENU. Then, press the appropriate number button to select an option. Or, use ◀/▶/▲/▼ buttons to highlight your selection, then press ENTER.

Title Menu DVD

1 Press TOP MENU.
If the current title has a menu, the menu will appear on the screen. Otherwise, the disc menu may appear.

2 The menu can list camera angles, spoken language and subtitle options, and chapters for the title.

3 To remove the title menu, press TOP MENU again.

Disc Menu DVD

1 Press MENU.
The disc menu is displayed.

2 To remove the disc menu, press MENU again.

Camera Angle DVD

If the disc contains sequences recorded from different camera angles, the angle icon blinks on the TV screen. You can then change the camera angle if you wish.

- Press ANGLE repeatedly during playback to select a desired angle.
The number of the current angle appears on the display.

Changing the Audio Language DVD

Press AUDIO repeatedly during playback to hear a different audio language or audio track.

Changing the Audio Channel

VCD2.0 VCD1.1

Press AUDIO repeatedly during playback to hear a different audio channel (STEREO, LEFT or RIGHT).

Subtitles DVD

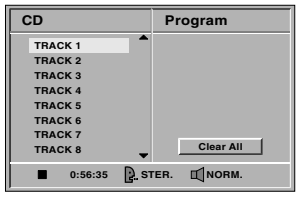
Press SUBTITLE repeatedly during playback to see the different subtitle languages.

Note

If ⃠ appears, the feature is not available on the disc.

Playing an Audio CD

1 **Insert a disc and close the tray.**
The menu appears on the TV screen.



Audio CD menu

2 **Press ▲/▼ to select a track then press PLAY.**
Playback starts.
During playback, the current track's elapsed playing time will appear on the display window.
Playback will stop at the end of the disc.

3 **To stop playback at any other time, press STOP.**

Pause CD

1 Press PAUSE/STEP during playback.

2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track CD

- Press SKIP (▶▶I) or SKIP (I◀◀) briefly during playback to go to the next track or to return to the beginning of the current track.
- Press SKIP (I◀◀) twice in quick successions to step back to the previous track.
- To go directly to any track, enter the track number using the numbered buttons (0-9) during playback.

Repeat Track/All/Off CD

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.

2 To repeat all tracks on a disc, press REPEAT a second time.
The Repeat All icon appears on the menu screen.

3 To cancel Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the menu screen.

Note

The REPEAT button is not available when the E mark appears.

Press PROGRAM to disappear the E mark.

Search CD

1 Press and hold REW or FWD for about two seconds during playback.
The player will now go into SEARCH mode.

2 Press REW or FWD repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).

3 Search speed and direction are indicated on the menu screen.

4 To exit SEARCH mode, press PLAY.

Random CD

1 Press RANDOM during playback or when playback is stopped.

The unit automatically begins Random Playback and "RAND." appears on the menu screen.

2 To return to normal playback, press RANDOM repeatedly until "RAND." disappears on the menu screen.

Repeat A-B CD

To repeat a sequence.

1 During disc playback, press A-B at your chosen starting point.
The Repeat icon and "A -" appears on the menu screen.

2 Press A-B again at your chosen end point.
The Repeat icon and "A B" appears on the menu screen, and the sequence begins to play repeatedly.

3 To exit the sequence and return to normal play, press A-B again.
The Repeat icon and "OFF" appear on the menu screen.

Selecting the sound enhancement CD

1 Press DISPLAY during playback.

2 Use ◀/▶ to select the sound icon.
The sound option will be highlighted.

3 Use ▲/▼ to select "NORM." or "3D SUR".

NORM. : Normal sound
3D SUR: This player can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

Changing the Audio Channel CD

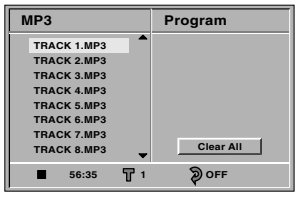
Press AUDIO repeatedly during playback to hear a different audio channel (STER., LEFT, or RIGHT).

Playing an MP3 disc MP3

The DVD Player can play MP3 formatted recordings on CD-ROM, CD-R or CD-RW discs.
Before playing MP3 recordings, read the notes on MP3 Recordings on right.

1 Insert a disc and close the tray.
The MP3/JPEG/WMA choice menu appears on the TV screen.

2 Press ▲/▼ to select the MP3 then press ENTER.
The MP3 menu appears on the TV screen.



MP3 menu

3 Press ▲/▼ to select a track then press PLAY.
Playback starts.
During playback, the current track's elapsed playing time will appear on the display.
Playback will stop at the end of the disc.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

4 To stop playback at any other time, press STOP.

Pause MP3

1 Press PAUSE/STEP during playback.
2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track MP3

- Press SKIP (▶▶I) or SKIP (I◀◀) briefly during playback to advance to the next track or to return to the beginning of the current track.
- Press SKIP (I◀◀) twice in quick successions to step back to the previous track.

Repeat Track/All/Off MP3

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.
2 To repeat all tracks on a disc, press REPEAT two times.
The Repeat All icon appears on the menu screen.
3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the menu screen.

Note

- The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.
- If you press SKIP (I◀◀) twice or SKIP (▶▶I) during Repeat Track playback, the repeat playback cancels.

Notes on MP3 Discs

About MP3

- An MP3 file is audio data compressed by using the MPEG1 audio layer-3 file-coding scheme. We call files that have the ".mp3" file extension "MP3 files".
- The player cannot read an MP3 file that has a file extension other than ".mp3".
- The player cannot read a non MP3 encoded file that has a file extension ".mp3".

MP3 Disc compatibility with this player is limited as follows:

1. Sampling Frequency / only at 44.1kHz
2. Bit rate / within 32 - 320kbps
3. CD-R physical format should be "ISO 9660"
4. If you record MP3 files using the software which cannot create a FILE SYSTEM, for example "Direct-CD" etc., it is impossible to playback MP3 files. We recommend that you use "Easy-CD Creator", which creates an ISO9660 file system.
5. A single session disc requires MP3 files in the first track. If there is no MP3 file in the 1st track, it cannot playback MP3 files. If you wish to playback MP3 files, format all the data in the disc or use a new one.
6. We do not recommend using CD-RW discs. Please use finished CD-R discs only.
7. File names should be named using 8 letters or less and must incorporate ".mp3" extension
   e.g. "********.MP3".
8. Do not use special letters such as "_?!><+*}{`[@]:;\/.," etc.
9. Total number of files on the disc should be less than 200.
10. Use 74 minute CD-R discs (650M), Do not use 80 minute CD-R (700M) software

This DVD player requires discs/recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 files). That require certain pre-existing conditions (see above) to insure compatible playback.

Customers should also note that permission is required in order to download MP3 files and music from the Internet. TOSHIBA cannot grant such permission. Permission should always be sought from the copyright owner.

Viewing a JPEG disc JPEG

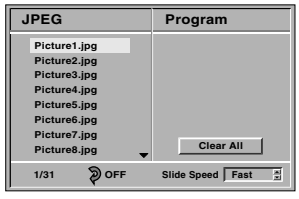
This DVD Player can play discs with JPEG files on it. Make sure the resolution of the JPEG files is less than 2 mega pixels (2M).

Notes

- Depending upon the size and number of the JPEG files, it could take a long time for the DVD player to read the disc's contents. If you don't see an on-screen display after several minutes, some of the files are too big — reduce the resolution of the JPEG files to less than 2 mega pixels and burn another disc.
- Total number of files on the disc should be less than 200.
- Some discs/files may be incompatible due to different recording format or condition of discs/files.

1 Insert a disc and close the tray.
The MP3/JPEG/WMA choice menu appears on the TV screen.

2 Press ▲/▼ to select the JPEG then press ENTER.
The JPEG menu appears on the TV screen.
Press RETURN to move to the previous menu (MP3/JPEG/WMA choice menu).



JPEG menu

3 If you want to view a particular file, press ▲/▼ to highlight a file and press ENTER or PLAY.
Viewing the file proceeding starts.
During viewing a file, press DISPLAY or RETURN to move to the previous menu (JPEG menu).
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

Tip

There are three viewing Slide Speed options: Fast, Normal, and Slow. Press ◄/► to highlight the Slide Speed then press ▲/▼ to select the option you want to use, and press ENTER.

4 To stop viewing at any other time, press STOP.
The JPEG menu appears.

Moving to another File

- Press SKIP (⏮) or SKIP (⏭) once during viewing to advance to the next file or to the previous file.

Repeat All/Off

1 To repeat all files on a disc, press REPEAT when JPEG menu appears.
The Repeat All icon appears on the menu screen.

2 Press PLAY or ENTER to start repeat playback.

3 To cancel Repeat mode, first press STOP to stop playback then press REPEAT when JPEG menu appears.
The Repeat Off icon appears on the menu screen.

Note

The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.

Notes on JPEG Files

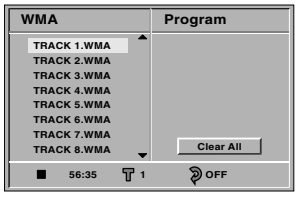
- When you are using software such as "Easy CD Creator" to burn the jpeg files into the CD-R, ensure that all the selected files have the ".jpg" extensions when copying into the CD layout.
- If the files have ".jpe" or ".jpeg" extensions, please rename them as ".jpg" files.
- File names without ".jpg" extension will not be able to be read by this DVD+VCR. Even though the files are shown as JPEG image files in windows explorer.

Playing an WMA disc WMA

The DVD Player can play WMA formatted recordings on CD-ROM, CD-R or CD-RW discs.

1 **Insert a disc and close the tray.**
The MP3/JPEG/WMA choice menu appears on the TV screen.

2 **Press ▲/▼ to select the WMA then press ENTER.**
The WMA menu appears on the TV screen.



WMA menu

3 **Press ▲/▼ to select a track then press PLAY.**
Playback starts.
During playback, the current track's elapsed playing time will appear on the display.
Playback will stop at the end of the disc.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

4 **To stop playback at any other time, press STOP.**

Pause WMA

1 Press PAUSE/STEP during playback.
2 To return to playback, press PLAY or press PAUSE/STEP again.

Moving to another Track WMA

- Press SKIP (▶▶I) or SKIP (I◀◀) briefly during playback to advance to the next track or to return to the beginning of the current track.
- Press SKIP (I◀◀) twice in quick successions to step back to the previous track.

Repeat Track/All/Off WMA

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.
2 To repeat all tracks on a disc, press REPEAT two times.
The Repeat All icon appears on the menu screen.
3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the menu screen.

Note

- The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.
- If you press SKIP (I◀◀) twice or SKIP (▶▶I) during Repeat Track playback, the repeat playback will be canceled.

WMA Disc compatibility with this player is limited as follows:

1. Sampling Frequency / within 32 - 44kHz
2. Bit rate / within 48 - 80kbps

Programmed Playback CD MP3 JPEG WMA VCD2.0 VCD1.1

Programmed Playback with Audio CD, MP3, JPEG or WMA Disc CD MP3 JPEG WMA

Program allows you to store your favorite tracks/files (or files) for a particular disc in the player memory. Program can contain 32 tracks (Audio CD/Video CD) or 60 tracks (MP3/JPEG/WMA disc).

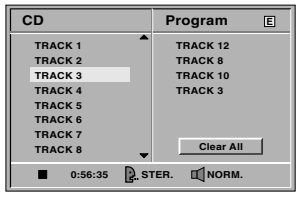
1 Insert a disc and close the tray.
- The Audio CD menu appears.
- If MP3, JPEG or WMA disc is inserted, the MP3/JPEG/WMA choice menu appears on the TV screen.
  Press ▲/▼ to select the MP3, JPEG or WMA then press ENTER. The MP3, JPEG or WMA menu appears on the TV screen. Press RETURN to move to the previous menu (MP3/JPEG/WMA choice menu).

2 Press PROGRAM in the stop mode or during playback (Audio CD, MP3 and WMA only) to enter the Program Edit mode.
The E mark will appear to the right of the word Program on the right side of the menu screen.

Note
Press PROGRAM to exit the Program Edit mode; the E mark will disappear.

3 Press ▲/▼ to select a track/file then press ENTER to place the selected track/file on the Program list.

4 Repeat step 3 to place additional tracks/files on the Program list.



For example: Audio CD menu

5 Press ▶.
The programmed track/file you selected last is highlighted on the program list.

6 Press ▲/▼ to select the track/file you want to start playing.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

7 Press ENTER or PLAY to start.
Playback begins in the order in which you programmed the tracks/files and "PROG." appears in the display window. Playback stops after playing the last programmed track/file on the program list.

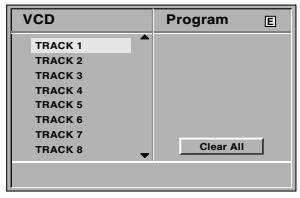
Note
The programmed tracks/files are cleared when the power is turned off or the disc is removed.

Programmed Playback with Video CD VCD2.0 VCD1.1

Note
On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Program function. See page 20.

1 Insert Video CD and close the tray.

2 Press PROGRAM while playback is stopped.
The VCD Program menu will appear.



Note
Press RETURN or PROGRAM to exit the Program menu.

3 Follow steps 3-7 of "Programmed Playback with Audio CD, MP3, JPEG or WMA Disc" on left.

Tip

To resume normal playback from programmed playback

Press and hold PROGRAM for 3 seconds until "PROG." indicator disappears in the display window.

Programmed Playback (Continued)

Repeat Programmed Tracks/All/Off

CD MP3 WMA

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.

2 To repeat all tracks on the program list, press REPEAT two times.
The Repeat All icon appears on the menu screen.

3 To cancel Repeat mode, press REPEAT repeatedly until the Repeat Off icon appears on the menu screen.

Note

If you press SKIP (⏮) twice or SKIP (⏭) during Repeat Track playback, the repeat playback cancels.

Repeat Programmed All/Off JPEG

1 To repeat all files on the program list, press REPEAT when JPEG menu appears.
The Repeat All icon appears on the menu screen.

2 Press PLAY or ENTER to start repeat playback.

3 To cancel Repeat mode, first press STOP to stop playback then press REPEAT when JPEG menu appears.

Note

The REPEAT button is not available when the E mark appear. Press PROGRAM to clear the E mark.

Erasing a Track/File from Program List

1 Press PROGRAM during playback or in the stop mode to enter the Program Edit mode.
The E mark will appear.

Note

JPEG can be programmed only in stop mode (when menu screen is displayed.)

2 Press ▶ to move to the Program list.

3 Use ▲/▼ to select the track/file that you wish to erase from the Program list.

4 Press CLEAR.
The track/file will be erased from the Program list.

Erasing the Complete Program List

1 Follow steps 1-2 of “Erasing a Track/File from Program List” as above.

2 Use ▲/▼ to select “Clear All”, then press ENTER.
The complete Program for the disc will be erased.
The programs are also cleared when the disc is removed.

Additional Information - DVD Part

One Touch Replay

Press INSTANT REPLAY during playback and the disc will reverse picture search through 10 seconds of playback. And then the playback will start from the point again.

Screen Saver

A screen saver image appears when you leave the DVD Player in stop mode for about five minutes.

Video Mode Setting DVD VCD2.0 VCD1.1

- With certain discs, the playback picture may be flickering or Dot Crawl is shown on straight lines. That means Vertical interpolation or De-interlace is not perfectly matched with the disc. In this case, the picture quality may be improved by changing the video mode.
- To change the video mode, press and hold DISPLAY about 3 seconds during disc playback. The new video mode number selected is displayed on the TV screen. Check whether the video quality has improved. If not, repeat the above procedure until picture quality is improved.
- Video mode sequence:
  Video1 → Video2 → Film → Adapt → Auto.
- If you turn off the power, the video mode will return to initial default state (Auto).

Detailed Description of each Video Mode

Auto : The source material of the DVD video (film material or video material) is determined from disc information.

Video1 : Suitable for playing video based content with comparatively little motion.

Video2 : Suitable for playing video based content with comparatively more motion.

Film : Suitable for playing film based content or video based material recorded by the progressive scan method.

Adapt : Determines the appropriate mode (film or video) during disc playback, and automatically selects the proper mode. Suitable for playing a disc comprised of film and video based content.

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction
No power.	• The power cord is disconnected.	• Plug the power cord into the wall outlet securely.
The power is on, but the DVD+VCR does not work.	• No disc is inserted. • No tape is inserted.	• Insert a disc or tape. (Check that the disc or tape indicator in the display window is lit.)
No picture.	• The TV is not set to receive DVD+VCR signal output.	• Select the appropriate video input mode on the TV so the picture from the DVD+VCR appears on the TV screen.
	• TV/VCR mode for DVD+VCR is set to TV.	• Press the TV/VCR button on the remote control repeatedly to choose VCR mode. TV indicator disappears in the display window.
	• The video cable is not connected securely.	• Connect the video cable securely.
	• The connected TV power is turned off.	• Turn on the TV.
No sound.	• The equipment connected with the audio cable is not set to receive DVD+VCR signal output.	• Select the correct input mode of the audio receiver so you can listen to the sound from the DVD+VCR.
	• The audio cables are not connected securely.	• Connect the audio cable securely.
	• The power of the equipment connected with the audio cable is turned off.	• Turn on the equipment connected with the audio cable.
	• The Digital Audio Output is set to the wrong position.	• Set the Digital Audio Output to the correct position, then turn on the DVD+VCR again by pressing POWER.
The playback picture is poor.	• The disc is dirty.	• Clean the disc.
	• Tape heads are dirty.	• Clean video heads.
	• Tape is a rental or was recorded on another VCR.	• Use CH/TRK (+/-) for manual tracking adjustment while tape is playing.
The DVD+VCR does not start playback.	• No disc is inserted. • No tape is inserted.	• Insert a disc or tape. (Check that the disc or tape indicator in the display window is lit.)
	• An unplayable disc is inserted.	• Insert a playable disc. (Check the disc type, color system, and Regional code.)
	• The disc is placed upside down.	• Place the disc with the playback side down.
	• The disc is not placed within the guide.	• Place the disc on the disc tray correctly inside the guide.
	• The disc is dirty.	• Clean the disc.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
The remote control does not work properly.	• The remote control is not pointed at the remote sensor of the DVD+VCR.	• Point the remote control at the remote sensor of the DVD+VCR.
	• The remote control is too far from the DVD+VCR.	• Operate the remote control within 23 ft (7 m).
	• There is an obstacle in the path of the remote control and the DVD+VCR.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.
	• This remote control use the same buttons for VCR and DVD functions (ex. PLAY).	• When using a VCR, first press the VCR button. When using a DVD, first press the DVD button.

Troubleshooting (Continued)

Symptom	Cause	Correction
Some channels are skipped over when using CH/TRK (+/-)	• Those channels were deleted with the CH. ADD/DEL option.	• Use CH. ADD/DEL. to restore channels. See “Channel Selection” on page 16.
Picture and sound of broadcasting channel are weak or missing.	• Antenna or cables are loose.	• Tighten connections or replace cable.
	• Wrong TUNING BAND option is being used.	• Try all TUNING BAND options. See “Channel Selection” on page 16 for details.
Camcorder image is not shown.	• Camcorder is off.	• Turn camcorder on and operate properly.
Camcorder image via A/V input to DVD+VCR is not shown on TV screen.	• DVD+VCR SOURCE SELECT is not set to LINE1 or LINE2.	• Press INPUT SELECT to select LINE input channel (LINE1 or LINE2).
Timer recording is not possible.	• Clock in DVD+VCR is not set to correct time.	• Set clock to correct time. See “Setting the Clock” on page 17.
	• Timer has been programmed incorrectly.	• Reprogram Timer. See “Timer Recording” on page 24.
	• TIMER indicator does not appear after programming timer.	• Reprogram Timer
TIMER indicator appears after DVD+VCR is turned off.	• DVD+VCR is in Timer Recording mode.	• This is the normal indication that the DVD+VCR is in TIMER mode.
Stereo Audio Record and/or Playback is not present.	• TV is not Stereo-compatible.	• No action is possible.
	• Broadcast program is not in stereo format.	• No action is possible.
	• DVD+VCR A/V Out jacks are not connected to TV A/V In jacks.	• Make A/V connections. Stereo is available only via A/V output from DVD+VCR.
	• DVD+VCR Audio/Video Out is not selected for viewing at the TV.	• Select AUX or A/V source as TV input.
	• DVD+VCR BROADCAST TYPE mode is set to SAP or MONO.	• Set BROADCAST TYPE mode to STEREO. See “Setting the VCR Setup Menu” on page 16.

Moisture Condensation

Moisture condensation can occur:	In locations where moisture condensation may occur:
• When the DVD+VCR is moved from a cold place to a warm place.	• Keep the DVD+VCR plugged into an AC power outlet with POWER On. This will help prevent condensation.
• Under extremely humid conditions.	• When condensation has occurred, wait a few hours for the DVD+VCR to dry before using it.

Language Code List

Enter the appropriate code number for the initial settings “Disc Audio”, “Disc Subtitle” and/or “Disc Menu” (See page 19).

Code	Language	Code	Language	Code	Language	Code	Language
6566	Abkhazian	7074	Fiji	7678	Lingala	8373	Singhalese
6565	Afar	7073	Finnish	7684	Lithuanian	8375	Slovak
6570	Afrikaans	7082	French	7775	Macedonian	8376	Slovenian
8381	Albanian	7089	Frisian	7771	Malagasy	8379	Somali
6577	Amharic	7176	Galician	7783	Malay	6983	Spanish
6582	Arabic	7565	Georgian	7776	Malayalam	8385	Sudanese
7289	Armenian	6869	German	7784	Maltese	8387	Swahili
6583	Assamese	6976	Greek	7773	Maori	8386	Swedish
6588	Aymara	7576	Greenlandic	7782	Marathi	8476	Tagalog
6590	Azerbaijani	7178	Guarani	7779	Moldavian	8471	Tajik
6665	Bashkir	7185	Gujarati	7778	Mongolian	8465	Tamil
6985	Basque	7265	Hausa	7865	Nauru	8484	Tatar
6678	Bengali; Bangla	7387	Hebrew	7869	Nepali	8469	Telugu
6890	Bhutani	7273	Hindi	7879	Norwegian	8472	Thai
6672	Bihari	7285	Hungarian	7982	Oriya	6679	Tibetan
6682	Breton	7383	Icelandic	8065	Panjabi	8473	Tigrinya
6671	Bulgarian	7378	Indonesian	8083	Pashto, Pushto	8479	Tonga
7789	Burmese	7365	Interlingua	7065	Persian	8482	Turkish
6669	Byelorussian	7165	Irish	8076	Polish	8475	Turkmen
7577	Cambodian	7384	Italian	8084	Portuguese	8487	Twi
6765	Catalan	7465	Japanese	8185	Quechua	8575	Ukrainian
9072	Chinese	7487	Javanese	8277	Rhaeto-Romance	8582	Urdu
6779	Corsican	7578	Kannada	8279	Romanian	8590	Uzbek
7282	Croatian	7583	Kashmiri	8285	Russian	8673	Vietnamese
6783	Czech	7575	Kazakh	8377	Samoan	8679	Volapük
6865	Danish	7589	Kirghiz	8365	Sanskrit	6789	Welsh
7876	Dutch	7579	Korean	7168	Scots Gaelic	8779	Wolof
6978	English	7585	Kurdish	8382	Serbian	8872	Xhosa
6979	Esperanto	7679	Laothian	8372	Serbo-Croatian	7473	Yiddish
6984	Estonian	7665	Latin	8378	Shona	8979	Yoruba
7079	Faeroese	7686	Latvian, Lettish	8368	Sindhi	9085	Zulu

Country/Area Code List

Enter the appropriate code number for the initial setting “Area Code” (See page 21).

Code	Country/Area
AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AZ	Azerbaidjan
BA	Bosnia-Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling) Islands
CF	Central African Republic
CG	Congo
CH	Switzerland
CI	Ivory Coast
CK	Cook Islands
CL	Chile
CM	Cameroon
CN	China
CO	Colombia
CR	Costa Rica
CS	Former Czechoslovakia
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
DO	Dominican Republic
DZ	Algeria
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara
ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
FM	Micronesia
FO	Faroe Islands
FR	France
FX	France (European Territory)
GA	Gabon
GB	Great Britain
GD	Grenada
GE	Georgia
GF	French Guyana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe (French)
GQ	Equatorial Guinea
GR	Greece
GS	S. Georgia & S. Sandwich Isls.
GT	Guatemala
GU	Guam (USA)
GW	Guinea Bissau
GY	Guyana
HK	Hong Kong
HM	Heard and McDonald Islands
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia6
KI	Kiribati
KM	Comoros
KN	Saint Kitts & Nevis Anguilla
KP	North Korea
KR	South Korea
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Laos
LB	Lebanon
LC	Saint Lucia
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libya
MA	Morocco
MC	Monaco
MD	Moldavia
MG	Madagascar
MH	Marshall Islands
MK	Macedonia
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana Islands
MQ	Martinique (French)
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia (French)
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru
PF	Polynesia (French)
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and Miquelon
PN	Pitcairn Island
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Reunion (French)
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan Mayen Islands
SK	Slovak Republic
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Saint Tome and Principe
SU	Former USSR
SV	El Salvador
SY	Syria
SZ	Swaziland
TC	Turks and Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand
TJ	Tadjikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania
UA	Ukraine
UG	Uganda
UK	United Kingdom
UM	USA Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State
VC	Saint Vincent & Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (USA)
VN	Vietnam
VU	Vanuatu
WF	Wallis and Futuna Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe

Specifications

General

Power requirements	AC 120V , 60 Hz
Power consumption	23W
Dimensions (approx.)	430 X 97.5 X 293 mm (16.9 x 3.9 x 11.5 inches) (w x h x d)
Mass (approx.)	4.8 kg (10.58 lbs)
Operating temperature	5˚C to 40˚C (41˚F to 104˚F)
Operating humidity	5 % to 90 %
Signal system	NTSC

Inputs

ANTENNA IN	Antenna or CATV input, 75 ohms
VHS VIDEO IN (LINE1, 2)	1 Vp-p 75 ohms, sync negative, RCA jack x 2
VHS AUDIO IN (LINE1, 2)	-6.0 dBm more than 47 kohms, RCA jack (L, R) x 2

Outputs

VIDEO OUT	1 Vp-p 75 ohms, sync negative
S-VIDEO OUT	(Y) 1.0 V (p-p), 75 ohms, negative sync, Mini DIN 4-pin x 1
	(C) 0.3 V (p-p) 75 ohms
COMPONENT VIDEO OUT	(Y) 1.0 V (p-p), 75 ohms, negative sync, RCA jack x 1
(Progressive Scan)	(Pb)/(Pr) 0.7 V (p-p), 75 ohms, RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 ohms, RCA jack x 1
Audio output (optical audio)	5 V (p-p), 75 Ω, Optical connector x 1
Audio output (analog audio)	2.0 Vrms (1 KHz, 0 dB), 330 ohms, RCA jack (L, R) x 1
RF OUT	Channel 3 or 4

VCR Specifications

Head system	Four head helical scan azimuth system
Timer	12-hour display type with AM, PM
Tape speed	SP: 33.35 mm/sec, LP: 16.67 mm/sec, SLP: 11.12 mm/sec
Tape width	12.7 mm
Maximum recording time	SP: 2 HOURS (T-120), SLP: 6 HOURS (T-120)/8 HOURS (T-160)
Rewind time	About 3 minutes (T-120)
Antenna	75 ohms (VHF/UHF)
VHF output signal	Channel 3 or 4 (Switchable)
Channel coverage	VHF: 2-13, UHF: 14-69, CATV: 1-125 (4A, A-W, W+1 - W+84, A-5 - A-1)
Frequency range	20Hz to 20kHz
Signal-to-noise ratio	More than 43dB
Dynamic range	More than 88 dB
Channel separation	More than 60 dB

DVD Specifications

Laser system	Semiconductor laser, wavelength 650 nm
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz, DVD (PCM 48 kHz): 8 Hz to 22 kHz
	CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT jacks only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 95 dB (DVD/CD)

Accessory:

Video cable x 1, Audio cable x 1, RF 75-ohm Coaxial Cable x 1, Remote control x 1, Batteries(AAA) x 2

- Design and specifications are subject to change without notice.

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DTS and DTS Digital Out are trademarks of Digital Theater Systems, Inc.

LIMITED WARRANTY DVD VIDEO PLAYER

Toshiba America Consumer Products, Inc. (“TACP”), Toshiba Hawaii (“THI”) and Toshiba Canada Limited (“TCL”) make the following limited warranties. These limited warranties extend to original purchaser or any person receiving this set as a gift from the original purchaser and to no other purchaser or transferee.

Limited Ninety (90) Day Warranty
TACP/THI warrant this product against defects in materials or workmanship for a period of ninety (90) days after the date of original retail purchase. During this period, TACP/ THI will repair or replace a defective product or part, at their option, with a new or refurbished product or part without charge to you. You must deliver the entire product to a TACP/THI Authorized Service Station. You are responsible for all transportation and insurance charges for the unit to and from the Authorized Service Station. If you live in the
U.S.A. you may, at your option, return your DVD Unit to:

Toshiba America Consumer Products Inc.
Returns Center
1420C Toshiba Dr.
Lebanon, TN 37087

Upon receipt we will, at our option, exchange the DVD Unit with a new or refurbished unit. **Canadian consumers are requested to contact TCL. In Hawaii consumers are requested to contact THI.**

Limited One (1) Year Warranty
TACP/THI further warrant the parts in this product against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. During this period, TACP/THI will repair or replace a defective product or part, at their option, with a new or refurbished product or part without charge to you, except that if a defective part is replaced after ninety (90) days from the date of the original retail purchase you pay labor charges involved in the replacement. You must also deliver the entire product to a TACP/THI Authorized Service Station. You are responsible for all transportation and insurance charges for the unit to and from the Authorized Service Station. If you live in the U.S.A. you may, at your option, return your DVD Unit to:

Toshiba America Consumer Products Inc.
Returns Center
1420C Toshiba Dr.
Lebanon, TN 37087

Upon receipt we will, at our option, exchange the DVD Unit with a new or refurbished unit. **Canadian Consumers are requested to contact TCL. In Hawaii consumers are requested to contact THI.**

Rental Units
The warranty for rental units begin with the first rental or thirty (30) days from the date of shipment to the rental firm, whichever comes first.

Commercial Units
Products sold and used for commercial use have a limited ninety (90) day warranty for all parts and labor.

Owner’s Manual
You should read the owner’s manual thoroughly before operating this product. You should complete and mail the enclosed Demographic card within ten (10) days after you, or the person who has given you this product as a gift, purchased this product. This is one way to enable TACP to provide you with better customer service and improved products. Failure to return the card will not affect your rights under this warranty.

Your Responsibility
The above warranties are subject to the following conditions:

(1) You must retain your bill of sale or provide other proof of purchase.
(2) You must notify a TACP/THI/TCL /Authorized Service Station within thirty (30) days after you discover a defective product or part.
(3) All warranty servicing of this product must be made by a TACP/THI/TCL Authorized Service Station.
(4) U.S.A. warranties are effective only if the product is purchased and operated in the Continental U.S.A. or Puerto Rico.
(5) Labor service charges for set installation. Set up, adjustment of customer controls and installation or repair of antenna systems are not covered by this warranty. Reception problems caused by inadequate antenna systems are your responsibility.
(6) Warranties extend only to defects in materials or workmanship as limited above and do not extend to any product or parts which have been lost or discarded by you or to damage to products or parts caused by misuse, accident, damage caused by Acts of God, such as lighting or fluctuations in electric power, improper installation, improper maintenance or use in violation of instructions furnished by us; or to units which have been altered or modified without authorization of TACP/THI/TCL or to damage to products or part thereof which have had the serial number removed, altered, defaced or rendered illegible.
(7) Should you elect to return your DVD Unit to TACP after the ninety (90) days and within one (1) year, or after the warranty period has expired: Call (800)-631-3811 to receive information concerning an exchange price. Payment must be enclosed with product in the form of a certified check or money order including reason for return.
(8) Physically damaged DVD Units are not acceptable for repair or exchange whether in or out of warranty and will be returned as received.

(Continued)

LIMITED WARRANTY DVD VIDEO PLAYER (Continued)

How to Obtain Warranty Service

(1) Refer to the troubleshooting guide in your owner's manual. This check list may solve your problem.
(2) In the U.S.A., only call the TACP toll free number 800-631-3811, or if in Hawaii or Canada see listing below within (30) days after you find a defective product or part.
(3) Arrange for the delivery of the product to the TACP/THI/TCL Authorized Service Station or TACP Return Center. Products shipped to the Service Station must be insured and safely and securely packed, preferably in the original shipping carton, and a letter explaining the defect and also a copy of the bill of sale or other proof of purchase must be enclosed.

In the Continental United States contact:

In Hawaii contact:
Toshiba Hawaii Inc.
327 Kamakee Street
Honolulu, HA 96814
(808)-521-5377

In Canada contact:
Consumer Electronics Group
191 McNabb Street
Markham, Ontario L3R 8H2
(905)-470-5400

Consumer Electronics Group
22171 Fraserwood Way
Richmond, B.C. V6W 1J5
(604)-303-2500

Consumer Electronics Group
1643 North Service Road
Droval, QC H9P 1J1
(514)-856-4100

All warranties implied by state law, including the implied warranties of merchantability and fitness for a particular purpose, are expressly limited to the duration of the limited warranties set forth above. With the exception of any warranties implied by state law as hereby limited, the foregoing warranty is exclusive and in lieu of all other warranties, guarantees, agreements and similar obligations of manufacturer or seller with respect to the repair or replacement of any parts. In no event shall TACP/THI be liable for consequential or incidental damages.
No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of these warranties in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of TACP/THI arising under the warranty or under any statute, or law of the United States or any state thereof, is hereby limited to ninety (90) days from the date you discover or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do not allow limitation on how long an implied warranty lasts, when an action may be brought, or the exclusion or limitation of incidental or consequential damages, so the above provisions may not apply to you.

ATTENTION CANADIAN CONSUMERS:
Canadian consumers are requested to complete the special Canadian "Warranty Registration Form" enclosed, and forward this completed form with a copy of bill of sale to TOSHIBA OF CANADA to "Register and Validate" their warranty. Product must be purchased from an Authorized Canadian Dealer. Products purchased in the U.S.A. and used in Canada are not covered by these warranties.

IMPORTANT: PACKING AND SHIPPING INSTRUCTION
When you send the product to a Service Station, you must use the original carton box and packing material, then insert the original carton box containing the unit into another carton using more packing material.

PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY, NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

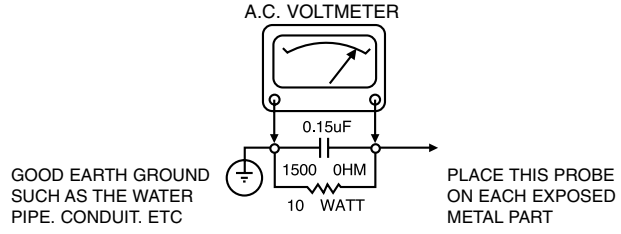
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUNING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.


A.C. VOLTMETER
0.15uF
1500 0HM
10 WATT
GOOD EARTH GROUND SUCH AS THE WATER PIPE. CONDUIT. ETC
PLACE THIS PROBE ON EACH EXPOSED METAL PART

SUBJECT: GRAPHIC SYMBOLS

THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T. ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
3. IT IS ESSNTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRA TION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED. THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY, WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE. AND THAT THE HIGH VOLTAGE READING BE RECORDER ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCES SIVE VOLTAGE.
6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT: IMPLOSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTE GRAL IMPLOSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.
2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PALCEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT. MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the VCR+DVD covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS. NOTE* : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.
Remembers Safety First:

General Servicing Precautions

1. Always unplug the VCR+DVD AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this VCR+DVD or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with whitch instruments covered by this service manual might be equipped.

5. Do not apply AC power to this VCR+DVD and/or any of its electrical assemblies unless all solid-state device heat sinks are cerrectly installed.

6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grouned-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder removal device. Some solder removal devices not classified a “anti-static” can generate electrical charges sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protec tive package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SECTION 2

CABINET & MAIN CHASSIS

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1. Cabinet and Main Frame Section 2-2

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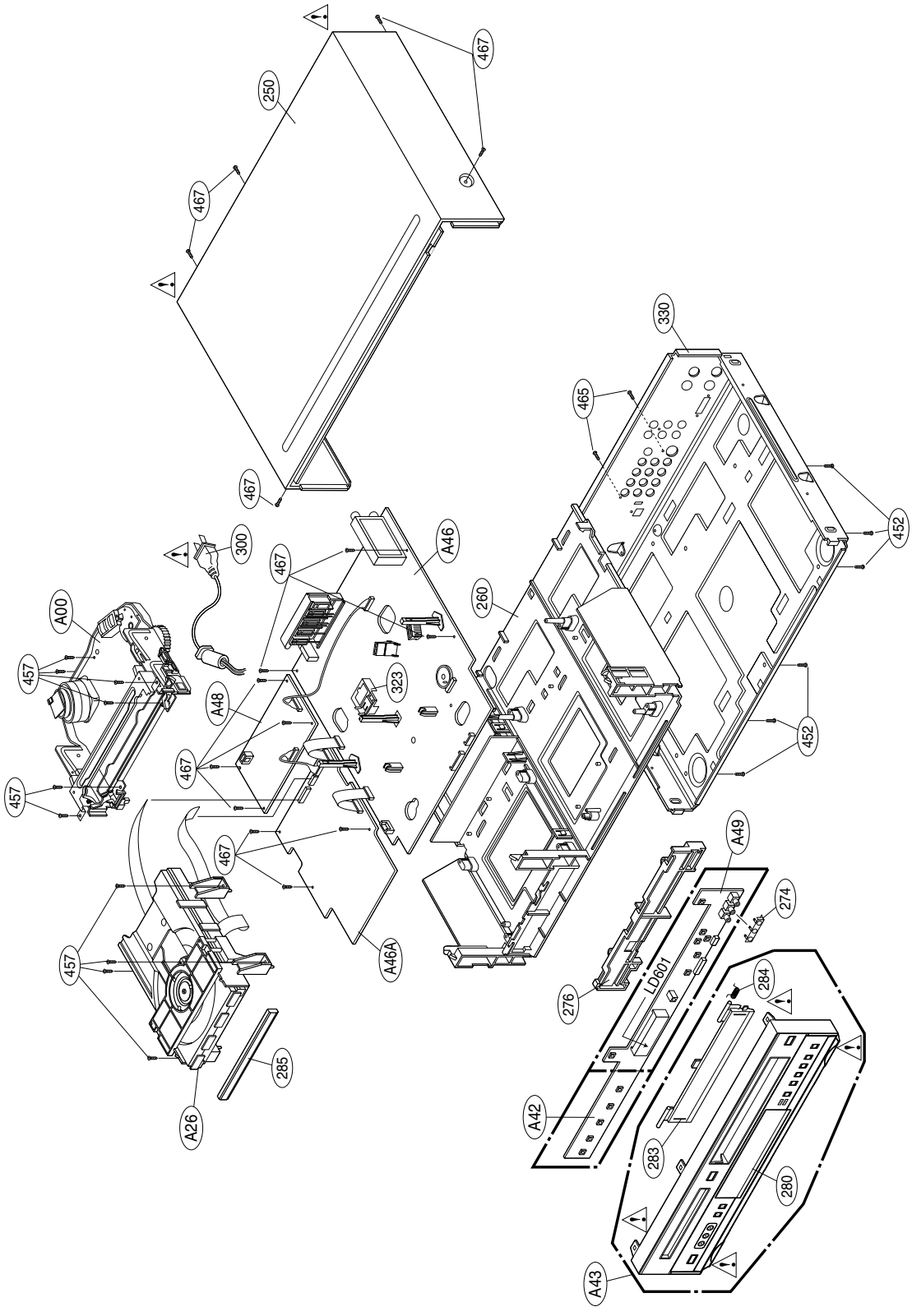
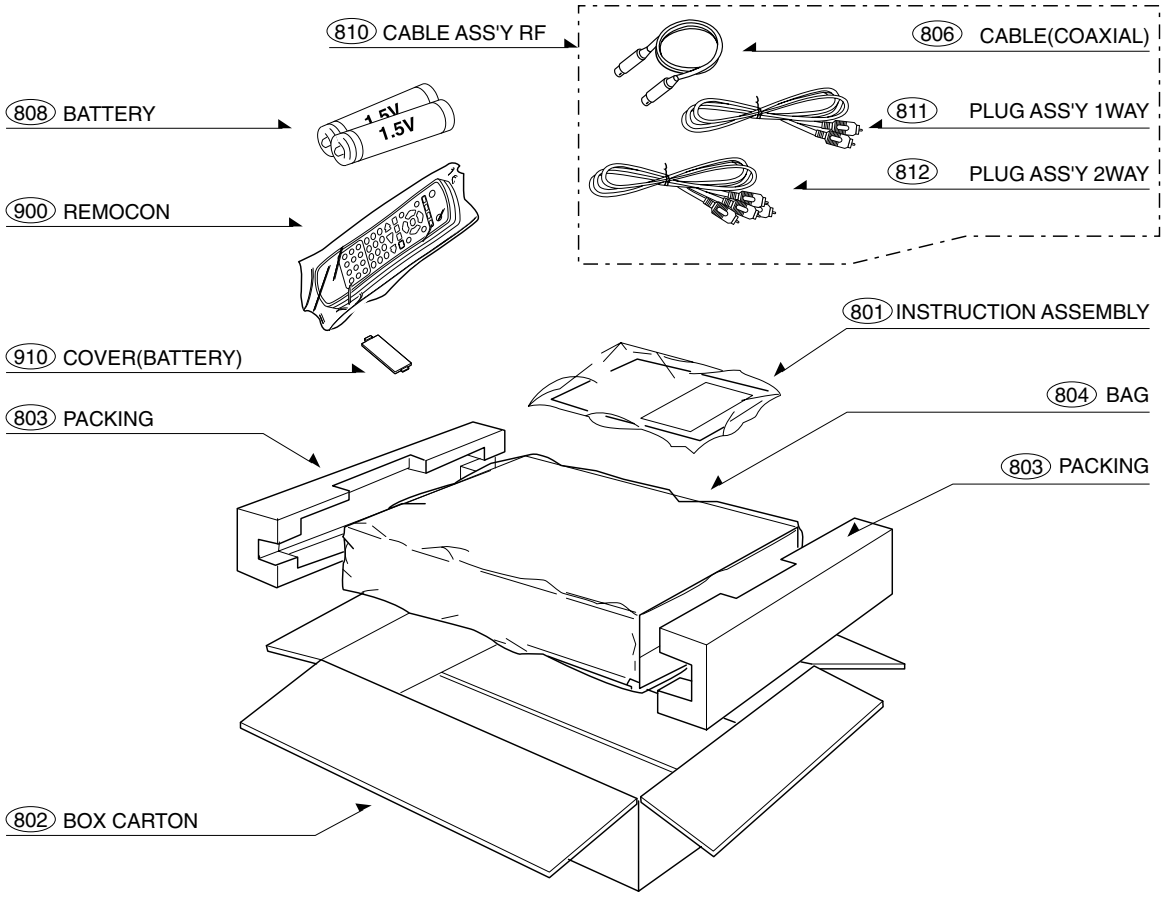
EXPLODED VIEWS

1. Cabinet and Main Frame Section



2.Packing Accessory Section



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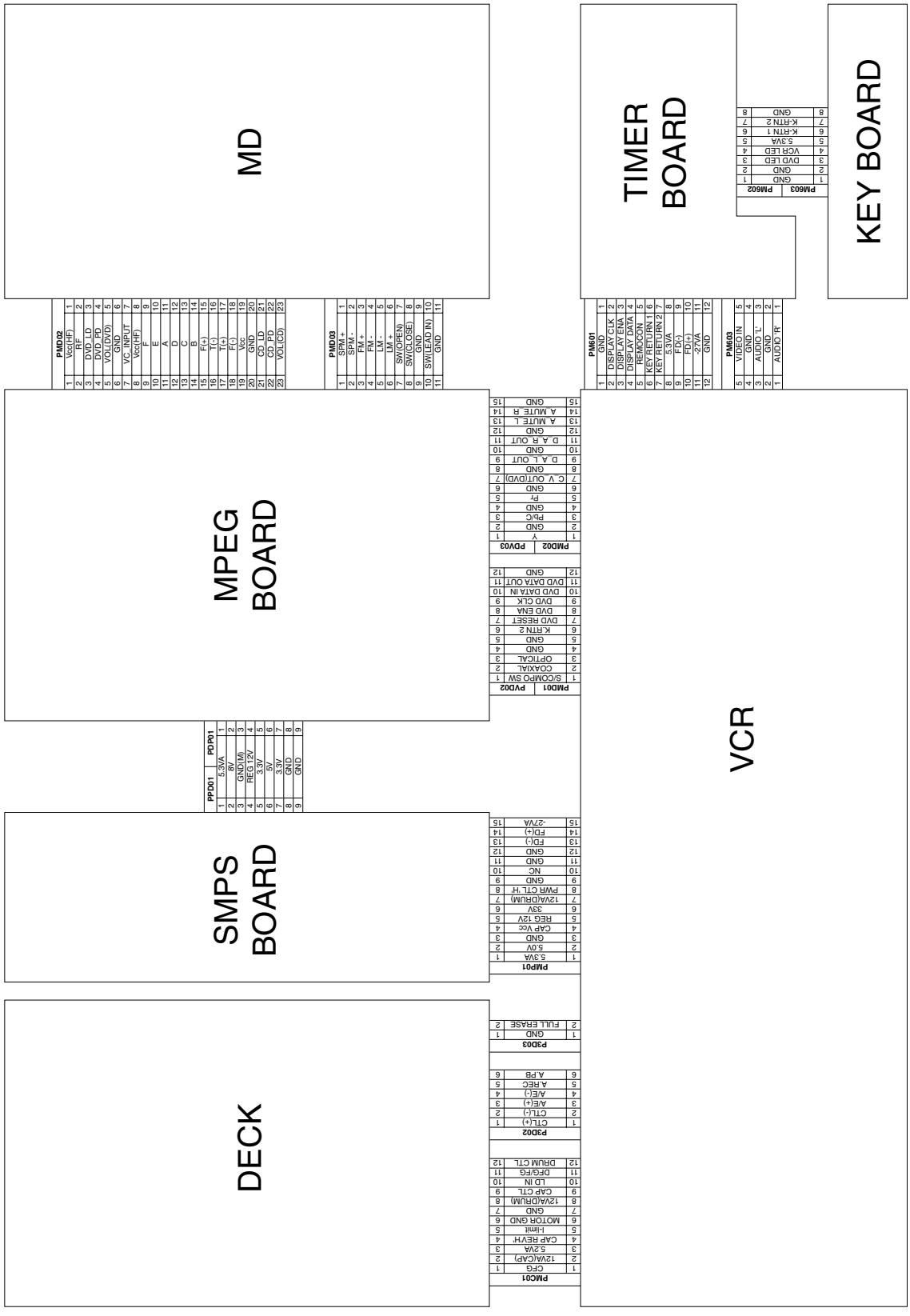
OVERALL WIRING DIAGRAM



VCR PART
ELECTRICAL ADJUSTMENT PROCEDURES

1. Servo Adjustment

1) PG Adjustment

• Test Equipment

a) OSCILLOSCOPE	b) NTSC MODEL : NTSC SP TEST TAPE

• Adjustment And Specification

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(W861, W862)	R/C TRK JIG KEY	6.5 ± 0.5H

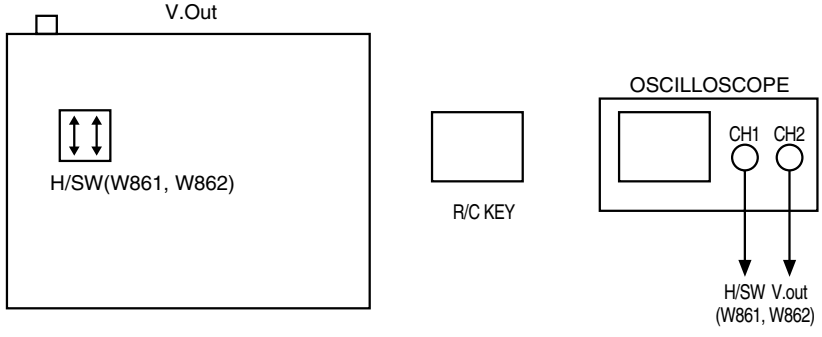
- **Adjustment Procedure**

a) Insert the SP Test Tape and play.
Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the “ATR” is blink after the SP Test Tape is inserted.
b) Connect the CH1 of the oscilloscope to the H/SW(W861, W862) and CH2 to the Video Out for the VCR.
c) Trigger the mixed Combo Video Signal of CH2 to the CH1 H/SW(W861, W862), and then check the distance (time difference), which is from the selected A(B) Head point of the H/SW(W861, W862) signal to the starting point of the vertical synchronized signal, to 6.5H ± 0.5H (412μs, 1H=63μs).

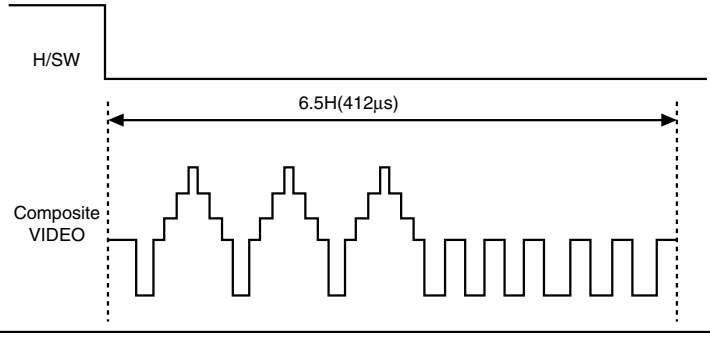
- **PG Adjustment Method**

a-1) Payback the SP standard tape
b-2) Press the “OK(ENTER)” key on the Remote controller and the “REC” key on the Front Panel the same time, then it goes in to Tracking initial mode.
c-3) Repeat the above step(No.b-2), then it finishes the PG adjusting automatically.
d-4) Stop the playback, then it goes out to PG adjusting mode after mony the PG data.

- **CONNECTION**



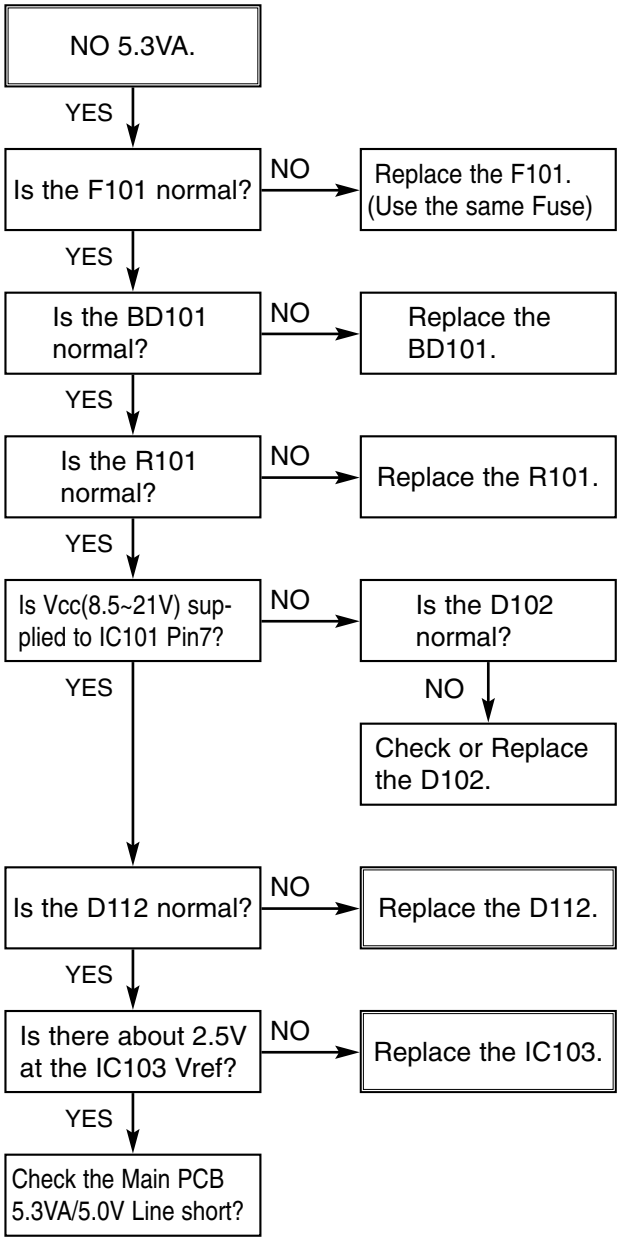
- **WAVEFORM**



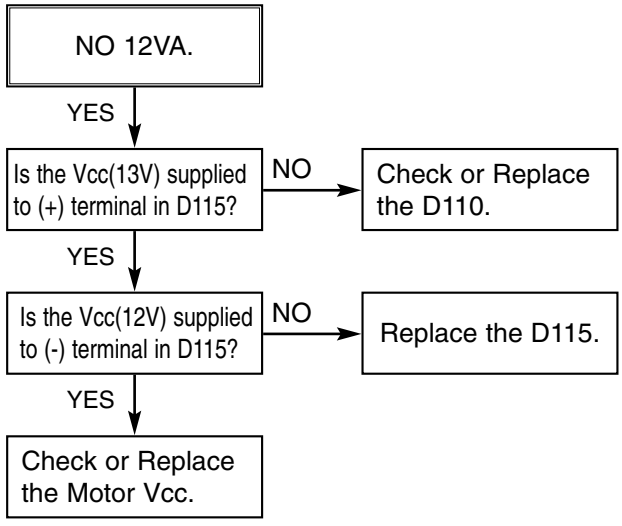
ELECTRICAL TROUBLESHOOTING GUIDE

1. Power(SMPS) CIRCUIT

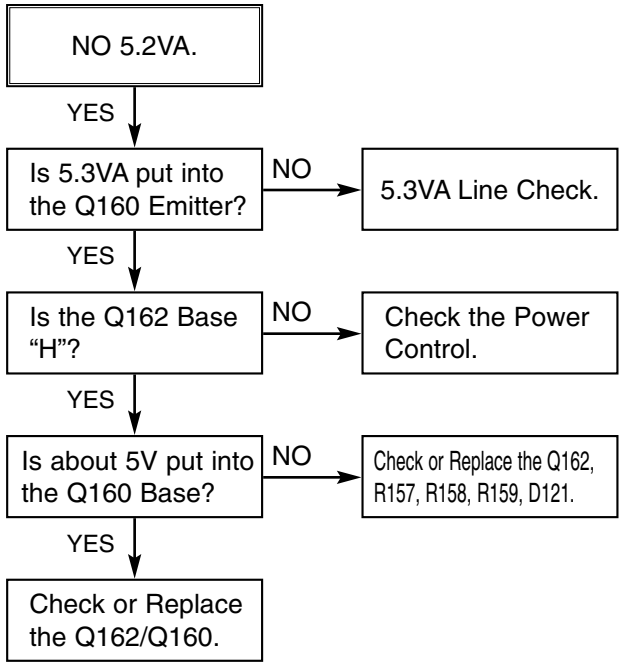
(1) No 5.3VA (SYS/Hi-Fi/TUNER)



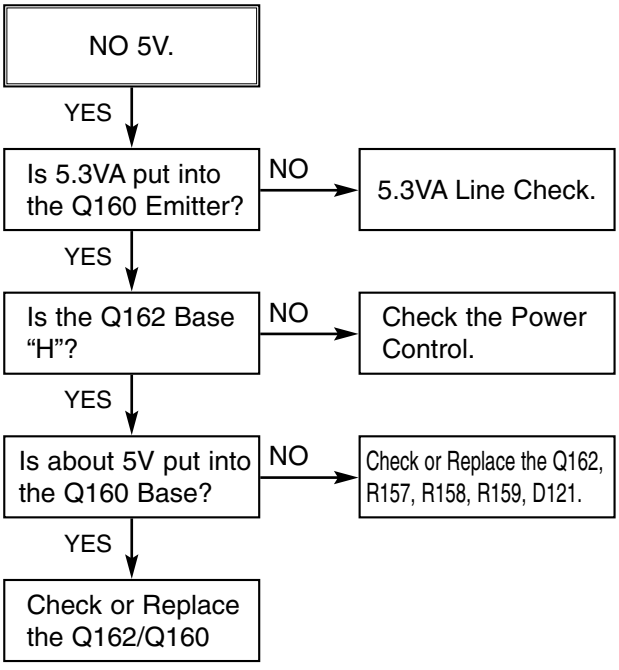
(2) No 12VA (TO CAP, DRUM MOTOR)



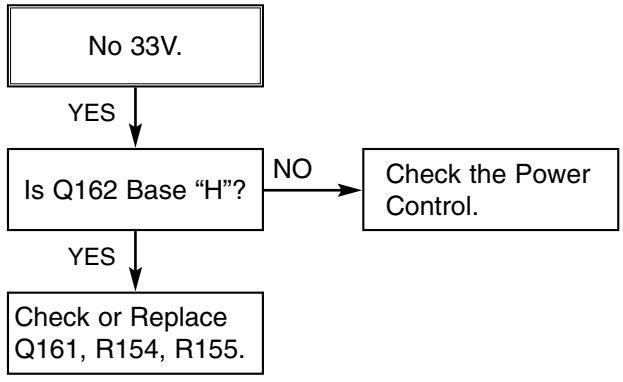
(3) No 5.2V (SYS/Hi-Fi/TUNER)



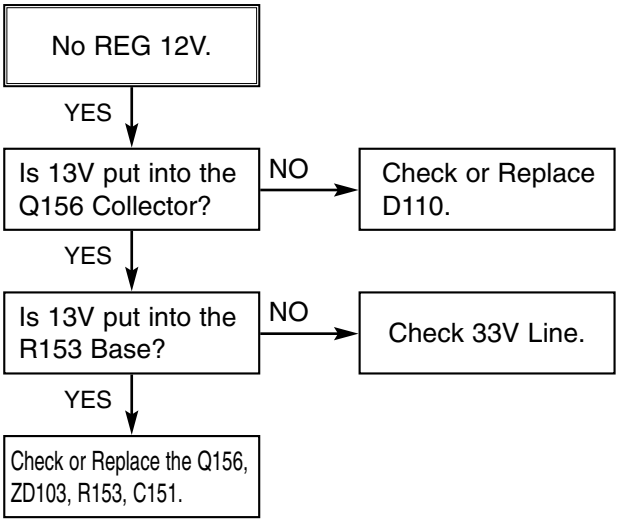
(4) No 5V (TO DVD)



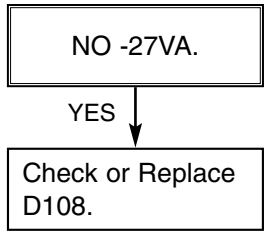
(5) No 33V (TUNER)



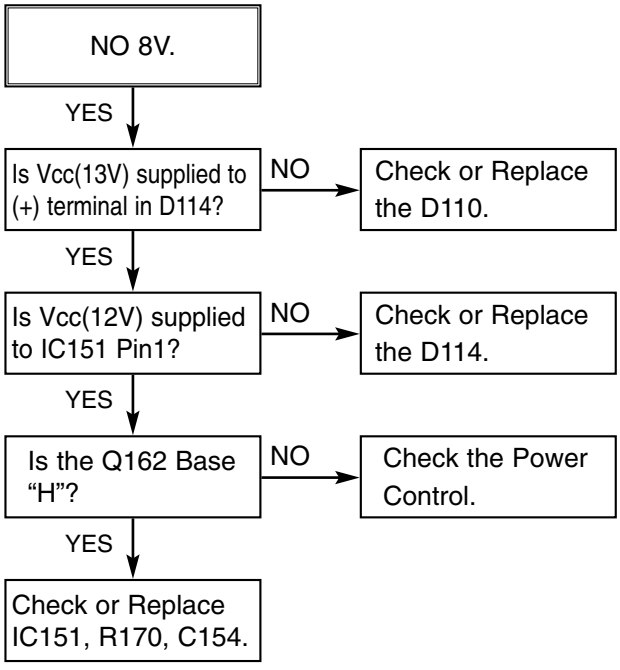
(6) No REG 12V



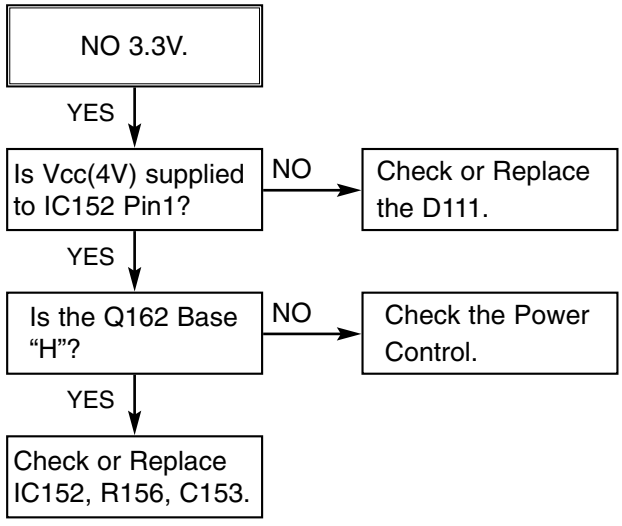
(7) No -27VA



(8) No 8V(TO DVD)

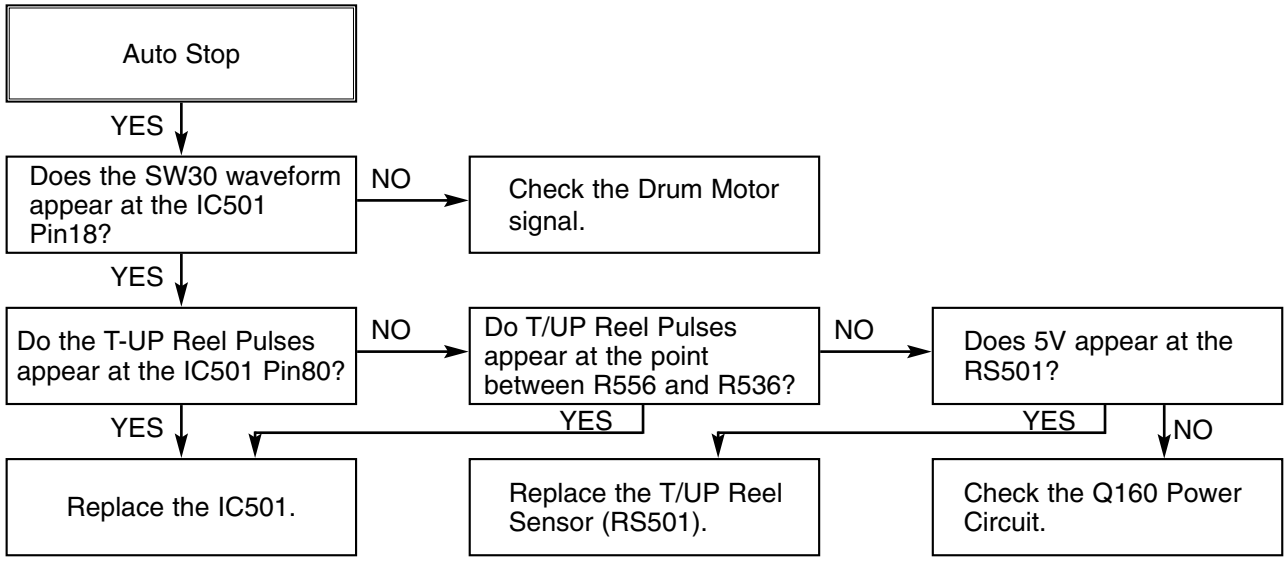


(9) No 3.3V(TO DVD)

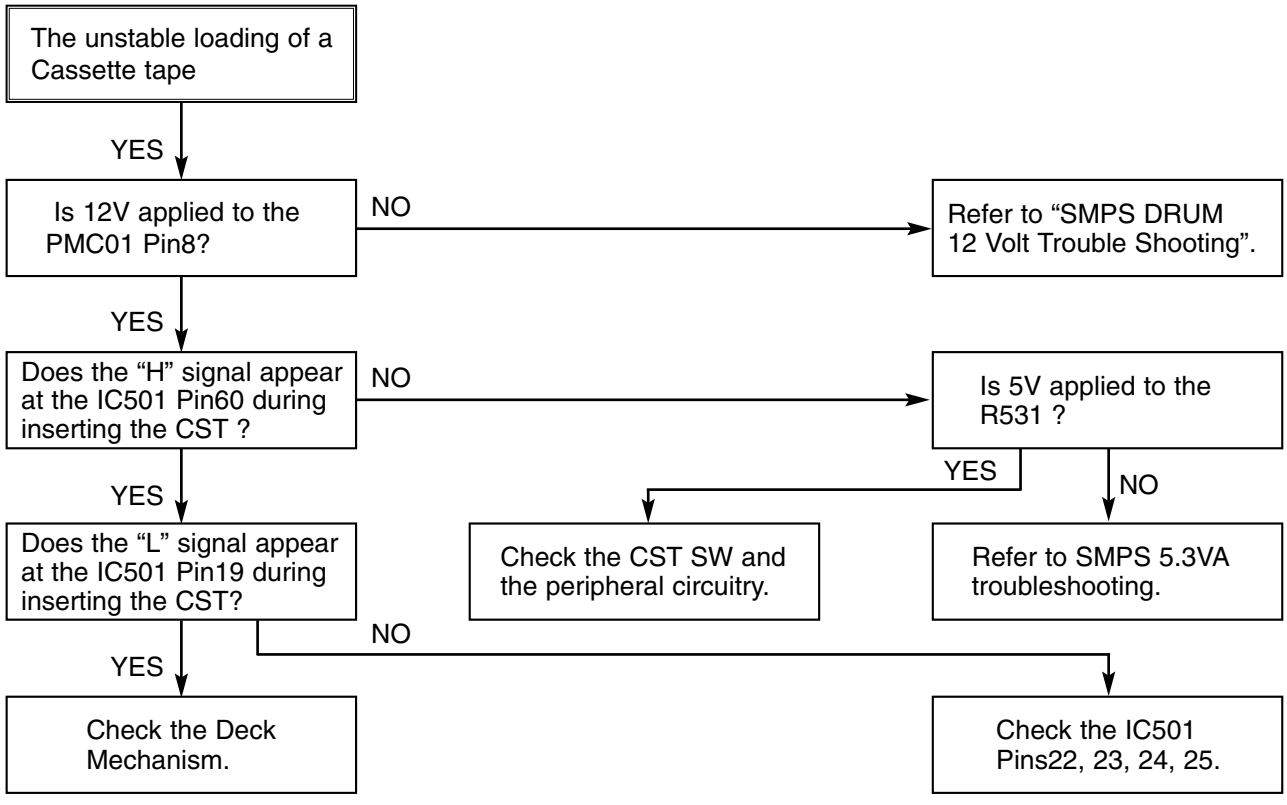


2. SYSTEM/KEY CIRCUIT

(1) AUTO STOP



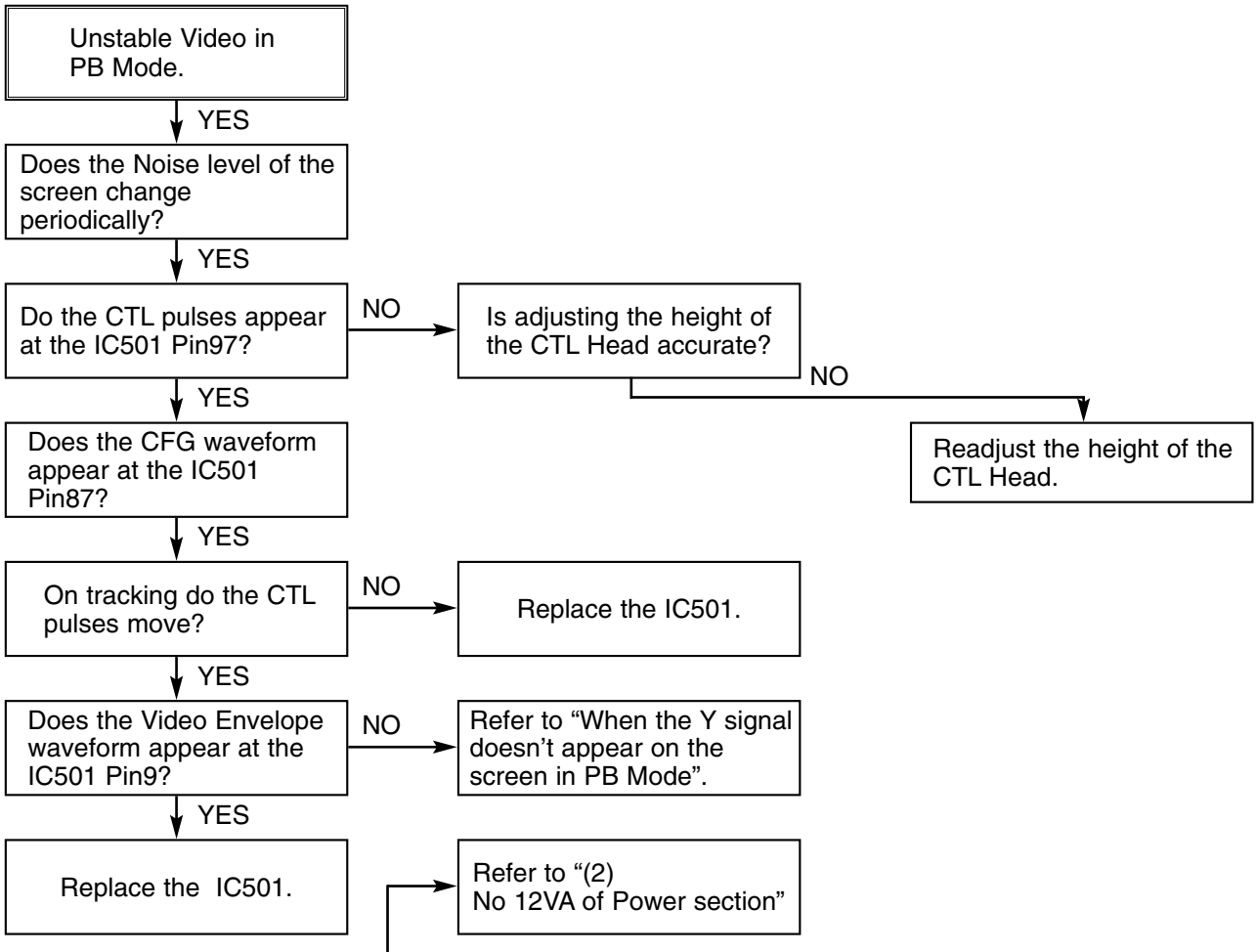
(2) The unstable loading of a Cassette tape


The unstable loading of a Cassette tape
YES
Is 12V applied to the PMC01 Pin8?
NO
Refer to “SMPS DRUM 12 Volt Trouble Shooting”.
YES
Does the “H” signal appear at the IC501 Pin60 during inserting the CST ?
NO
Is 5V applied to the R531 ?
YES
NO
YES
Does the “L” signal appear at the IC501 Pin19 during inserting the CST?
Check the CST SW and the peripheral circuitry.
Refer to SMPS 5.3VA troubleshooting.
NO
YES
Check the Deck Mechanism.
Check the IC501 Pins22, 23, 24, 25.

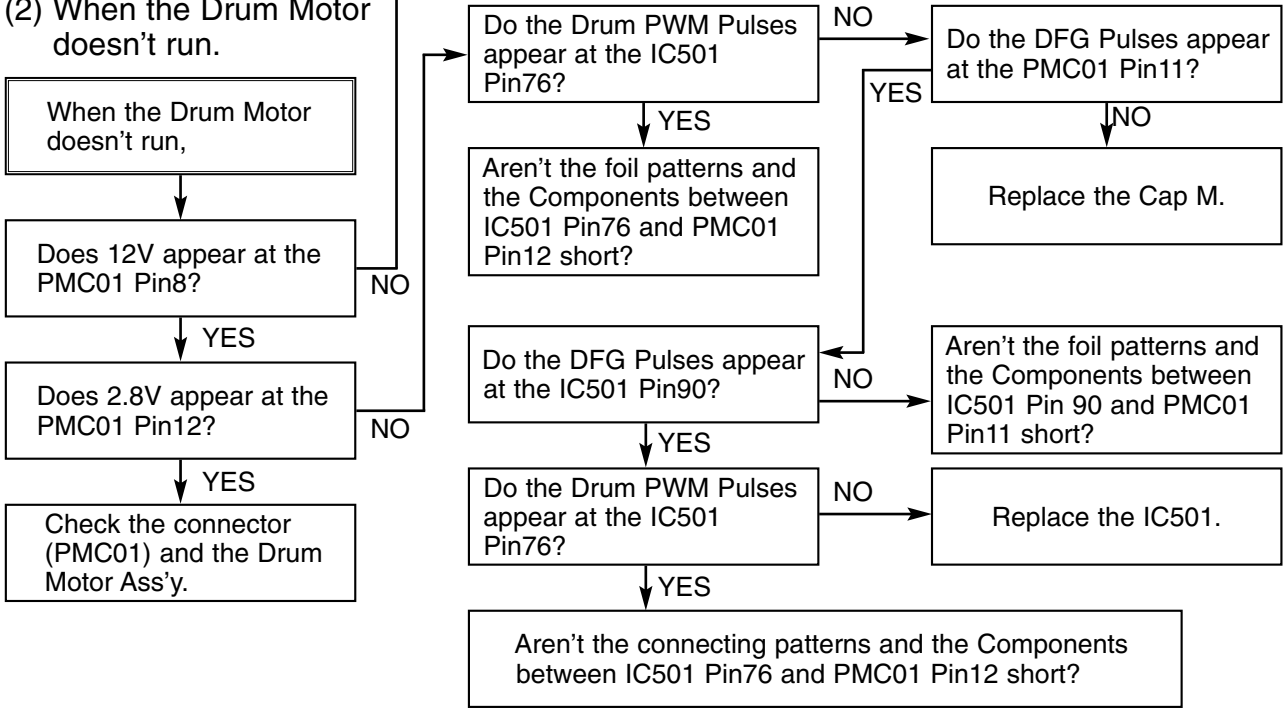
Caution : Auto stop can occur because Grease or Oil is dried up

3. SERVO CIRCUIT

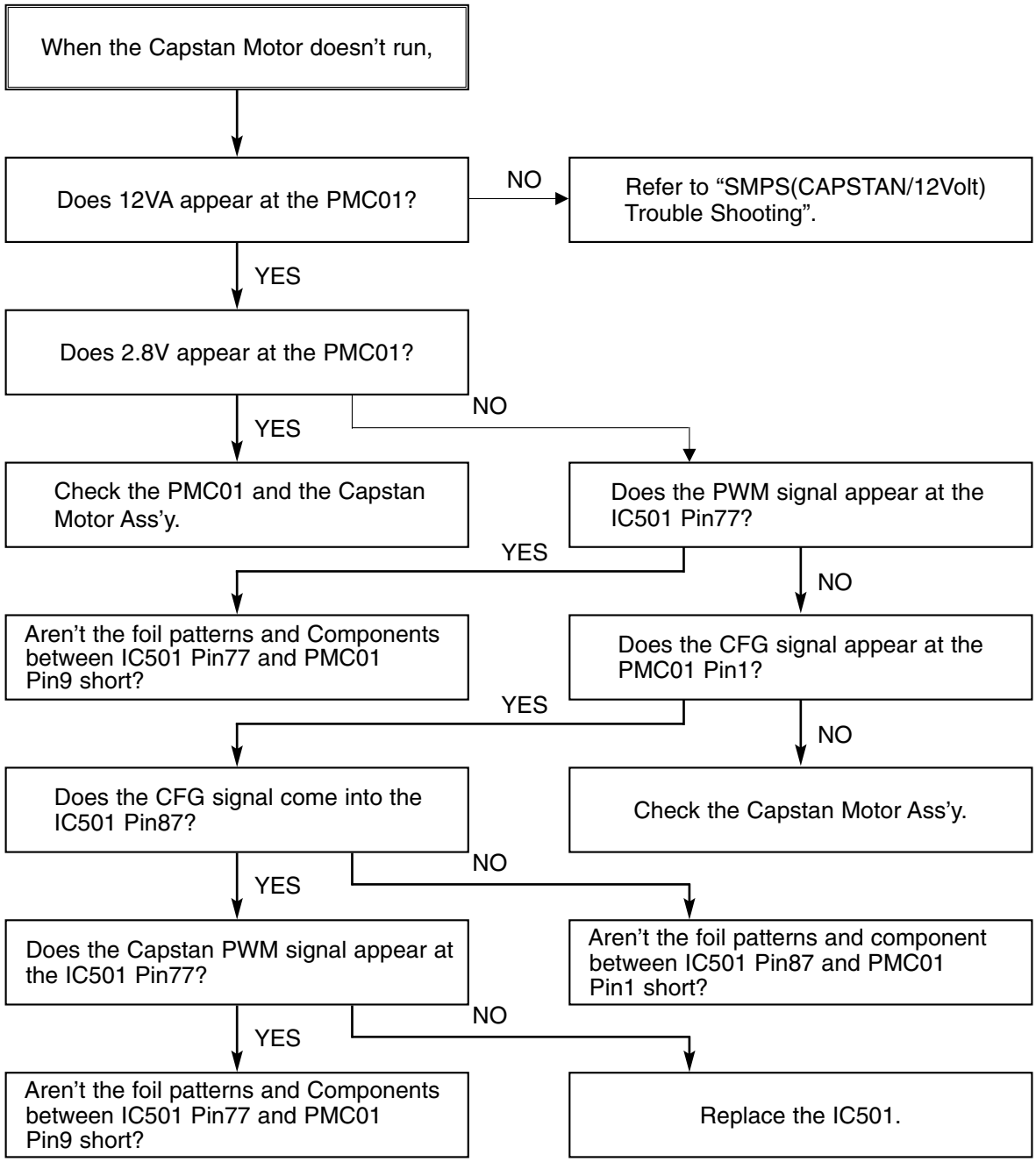
(1) Unstable Video in PB MODE


Unstable Video in PB Mode.
YES
Does the Noise level of the screen change periodically?
YES
Do the CTL pulses appear at the IC501 Pin97?
NO
Is adjusting the height of the CTL Head accurate?
NO
Readjust the height of the CTL Head.
YES
Does the CFG waveform appear at the IC501 Pin87?
YES
On tracking do the CTL pulses move?
NO
Replace the IC501.
YES
Does the Video Envelope waveform appear at the IC501 Pin9?
NO
Refer to "When the Y signal doesn't appear on the screen in PB Mode".
YES
Replace the IC501.

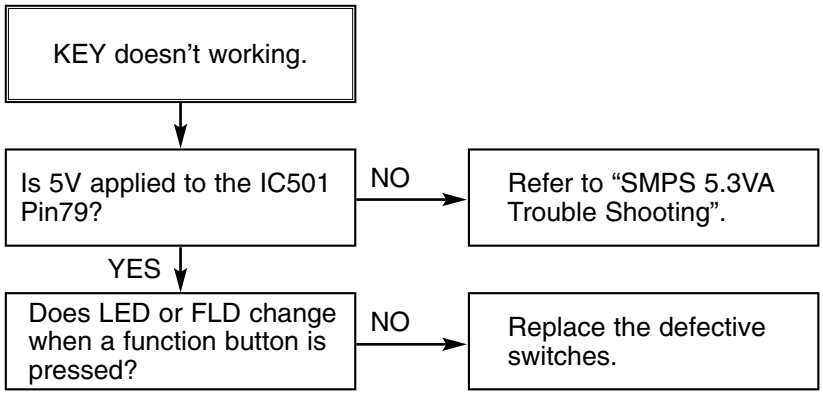
(2) When the Drum Motor doesn't run.


When the Drum Motor doesn't run,
Does 12V appear at the PMC01 Pin8?
NO
Refer to "(2) No 12VA of Power section"
YES
Does 2.8V appear at the PMC01 Pin12?
NO
Do the Drum PWM Pulses appear at the IC501 Pin76?
NO
Do the DFG Pulses appear at the PMC01 Pin11?
YES
NO
YES
Aren't the foil patterns and the Components between IC501 Pin76 and PMC01 Pin12 short?
Replace the Cap M.
YES
Check the connector (PMC01) and the Drum Motor Ass'y.
Do the DFG Pulses appear at the IC501 Pin90?
NO
Aren't the foil patterns and the Components between IC501 Pin 90 and PMC01 Pin11 short?
YES
Do the Drum PWM Pulses appear at the IC501 Pin76?
NO
Replace the IC501.
YES
Aren't the connecting patterns and the Components between IC501 Pin76 and PMC01 Pin12 short?

(3) When the Capstan Motor doesn't run,

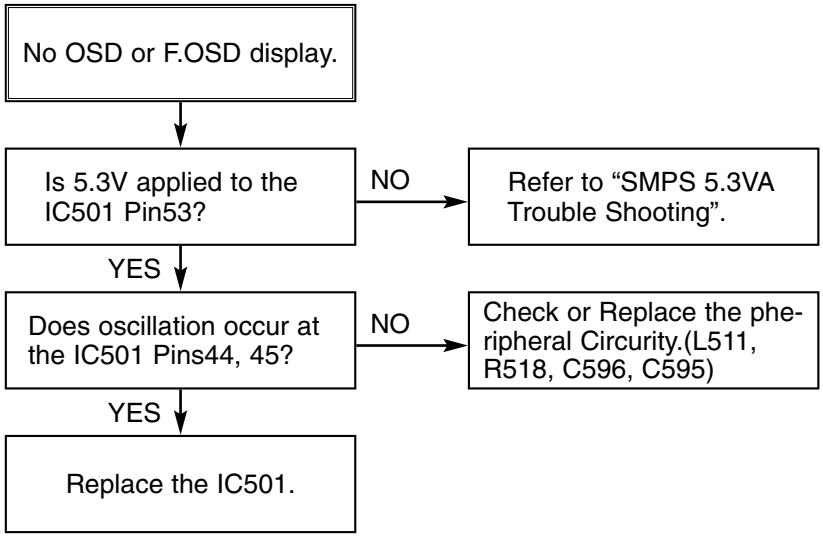

When the Capstan Motor doesn't run,
Does 12VA appear at the PMC01?
NO
Refer to "SMPS(CAPSTAN/12Volt) Trouble Shooting".
YES
Does 2.8V appear at the PMC01?
NO
YES
Check the PMC01 and the Capstan Motor Ass'y.
Does the PWM signal appear at the IC501 Pin77?
YES
NO
Aren't the foil patterns and Components between IC501 Pin77 and PMC01 Pin9 short?
Does the CFG signal appear at the PMC01 Pin1?
YES
NO
Does the CFG signal come into the IC501 Pin87?
Check the Capstan Motor Ass'y.
NO
YES
Does the Capstan PWM signal appear at the IC501 Pin77?
Aren't the foil patterns and component between IC501 Pin87 and PMC01 Pin1 short?
NO
YES
Aren't the foil patterns and Components between IC501 Pin77 and PMC01 Pin9 short?
Replace the IC501.

(4) KEY doesn't working

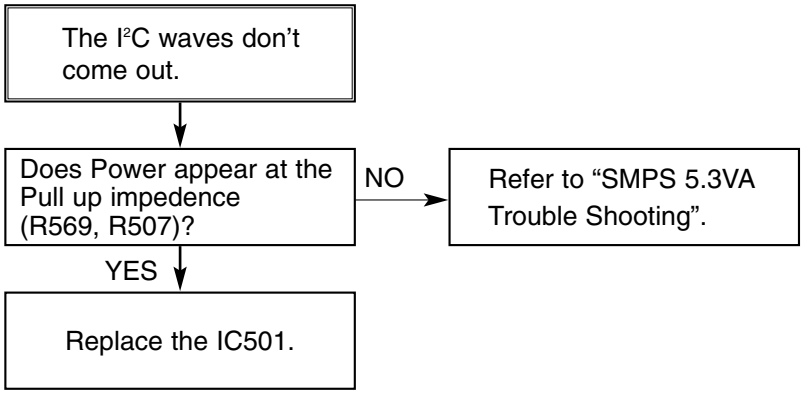

KEY doesn't working.
Is 5V applied to the IC501 Pin79?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Does LED or FLD change when a function button is pressed?
NO
Replace the defective switches.

4. OSD CIRCUIT

(1) No OSD display.

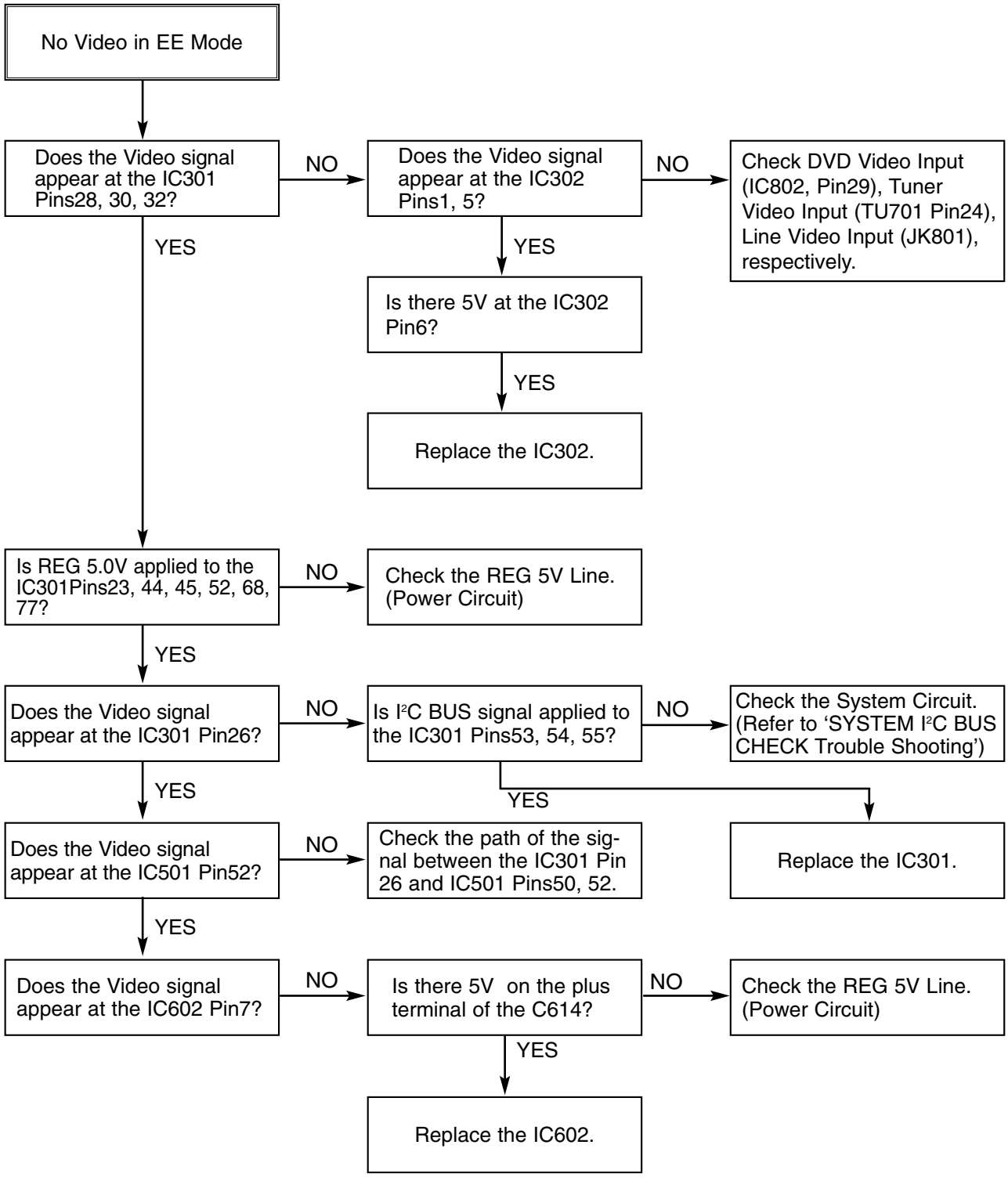

No OSD or F.OSD display.
Is 5.3V applied to the IC501 Pin53?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Does oscillation occur at the IC501 Pins44, 45?
NO
Check or Replace the pheripheral Circurity.(L511, R518, C596, C595)
YES
Replace the IC501.

(2) I^2C BUS CHECK

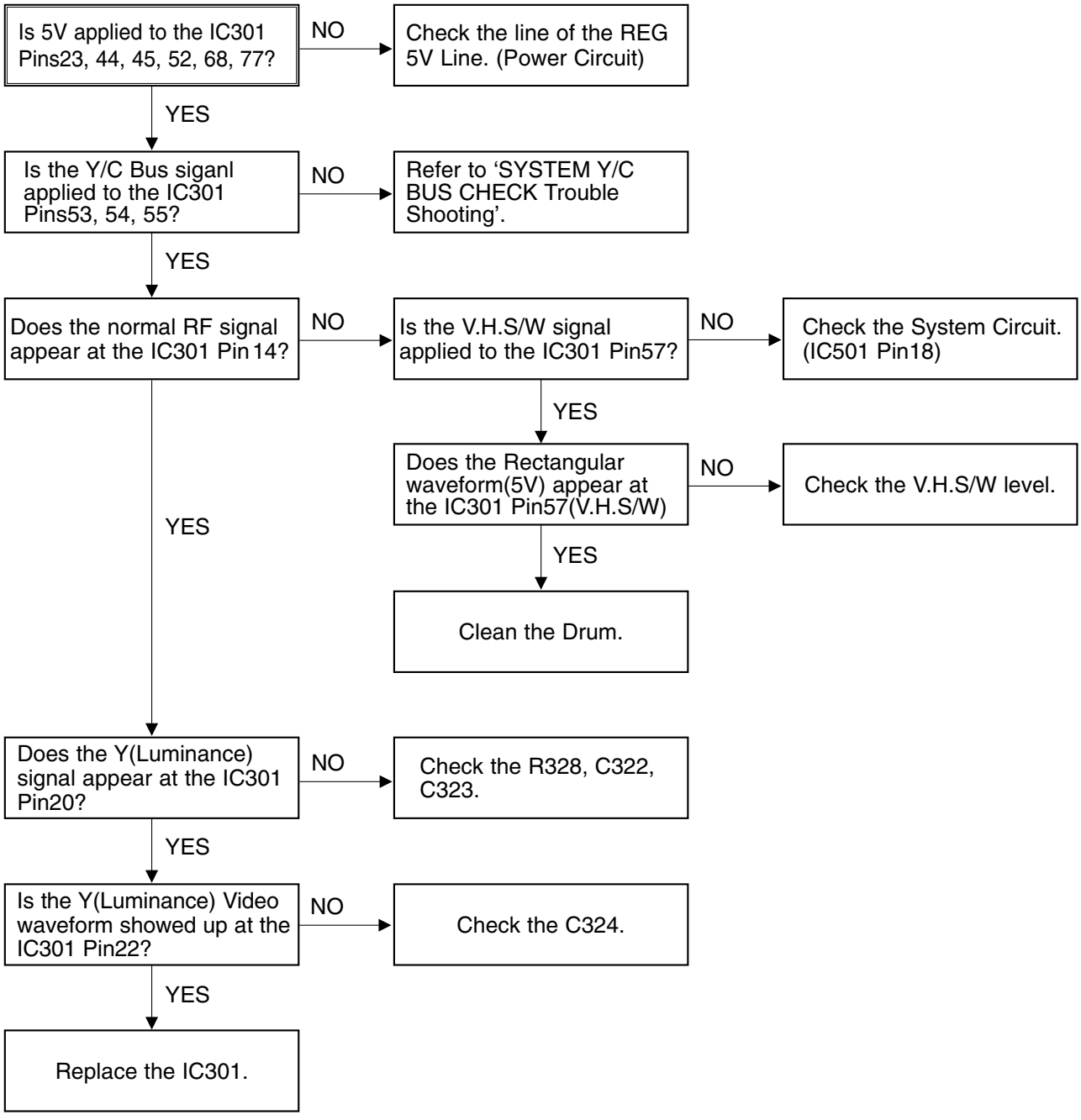

The I²C waves don't come out.
Does Power appear at the Pull up impedence (R569, R507)?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Replace the IC501.

5. Y/C CIRCUIT

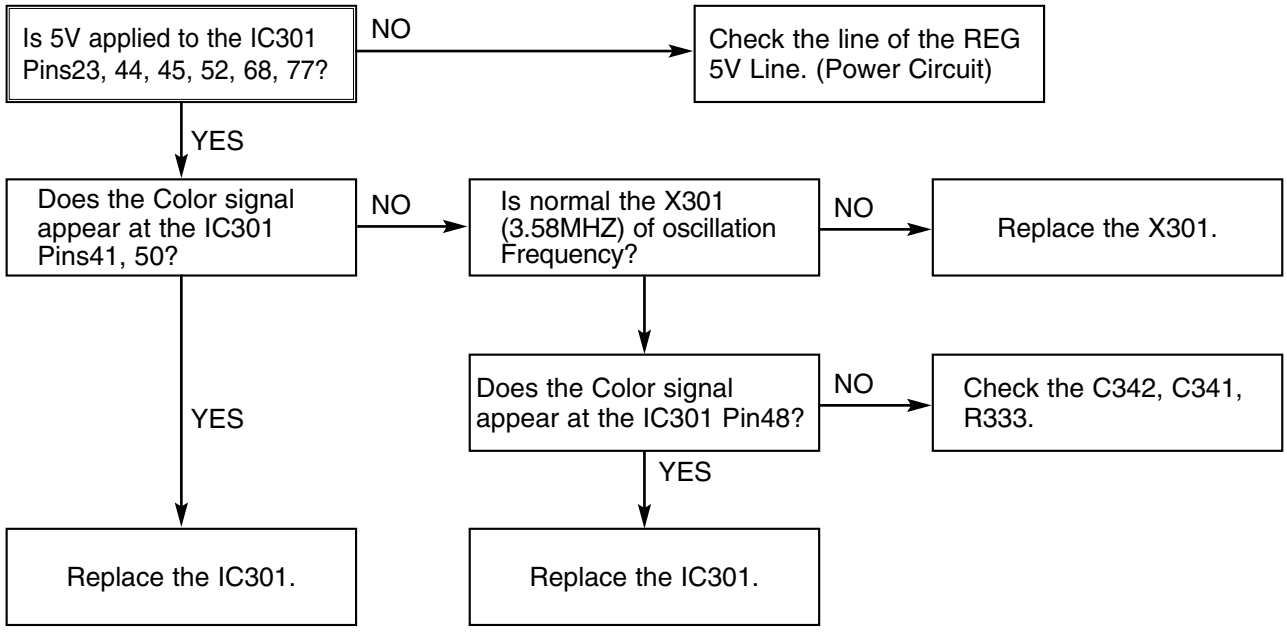
(1) No Video in EE Mode,


No Video in EE Mode
Does the Video signal appear at the IC301 Pins28, 30, 32?
NO
Does the Video signal appear at the IC302 Pins1, 5?
NO
Check DVD Video Input (IC802, Pin29), Tuner Video Input (TU701 Pin24), Line Video Input (JK801), respectively.
YES
YES
Is there 5V at the IC302 Pin6?
YES
Replace the IC302.
Is REG 5.0V applied to the IC301Pins23, 44, 45, 52, 68, 77?
NO
Check the REG 5V Line. (Power Circuit)
YES
Does the Video signal appear at the IC301 Pin26?
NO
Is I²C BUS signal applied to the IC301 Pins53, 54, 55?
NO
Check the System Circuit. (Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting')
YES
YES
Does the Video signal appear at the IC501 Pin52?
NO
Check the path of the signal between the IC301 Pin 26 and IC501 Pins50, 52.
Replace the IC301.
YES
Does the Video signal appear at the IC602 Pin7?
NO
Is there 5V on the plus terminal of the C614?
NO
Check the REG 5V Line. (Power Circuit)
YES
Replace the IC602.

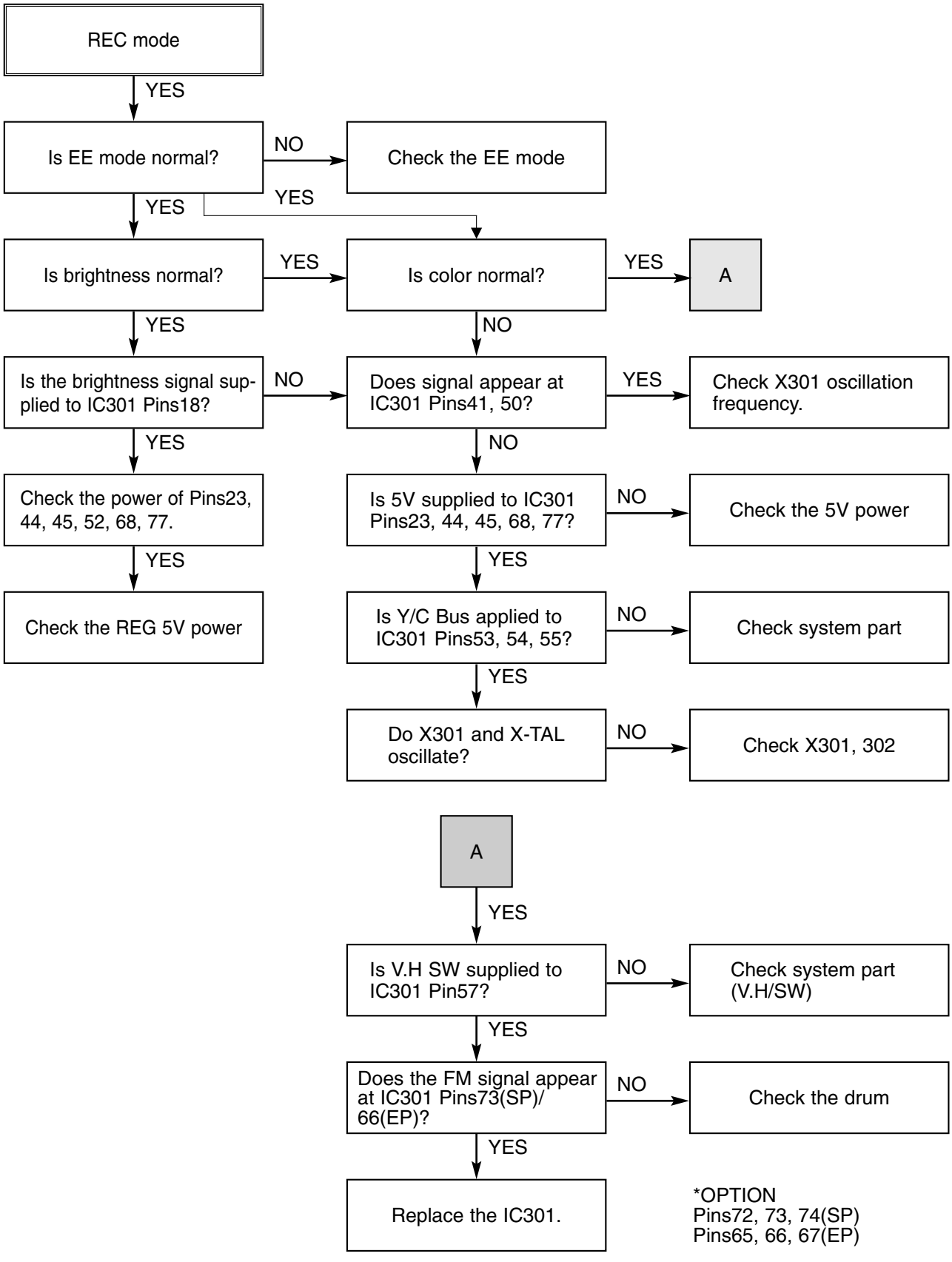
(2) When the Y(Luminance) signal doesn't appear on the screen in PB Mode,


Is 5V applied to the IC301 Pins23, 44, 45, 52, 68, 77?
NO
Check the line of the REG 5V Line. (Power Circuit)
YES
Is the Y/C Bus siganl applied to the IC301 Pins53, 54, 55?
NO
Refer to 'SYSTEM Y/C BUS CHECK Trouble Shooting'.
YES
Does the normal RF signal appear at the IC301 Pin 14?
NO
Is the V.H.S/W signal applied to the IC301 Pin57?
NO
Check the System Circuit. (IC501 Pin18)
YES
Does the Rectangular waveform(5V) appear at the IC301 Pin57(V.H.S/W)
NO
Check the V.H.S/W level.
YES
YES
Clean the Drum.
Does the Y(Luminance) signal appear at the IC301 Pin20?
NO
Check the R328, C322, C323.
YES
Is the Y(Luminance) Video waveform showed up at the IC301 Pin22?
NO
Check the C324.
YES
Replace the IC301.

(3) When the C(Color) signal doesn't appear on the screen in PB Mode,

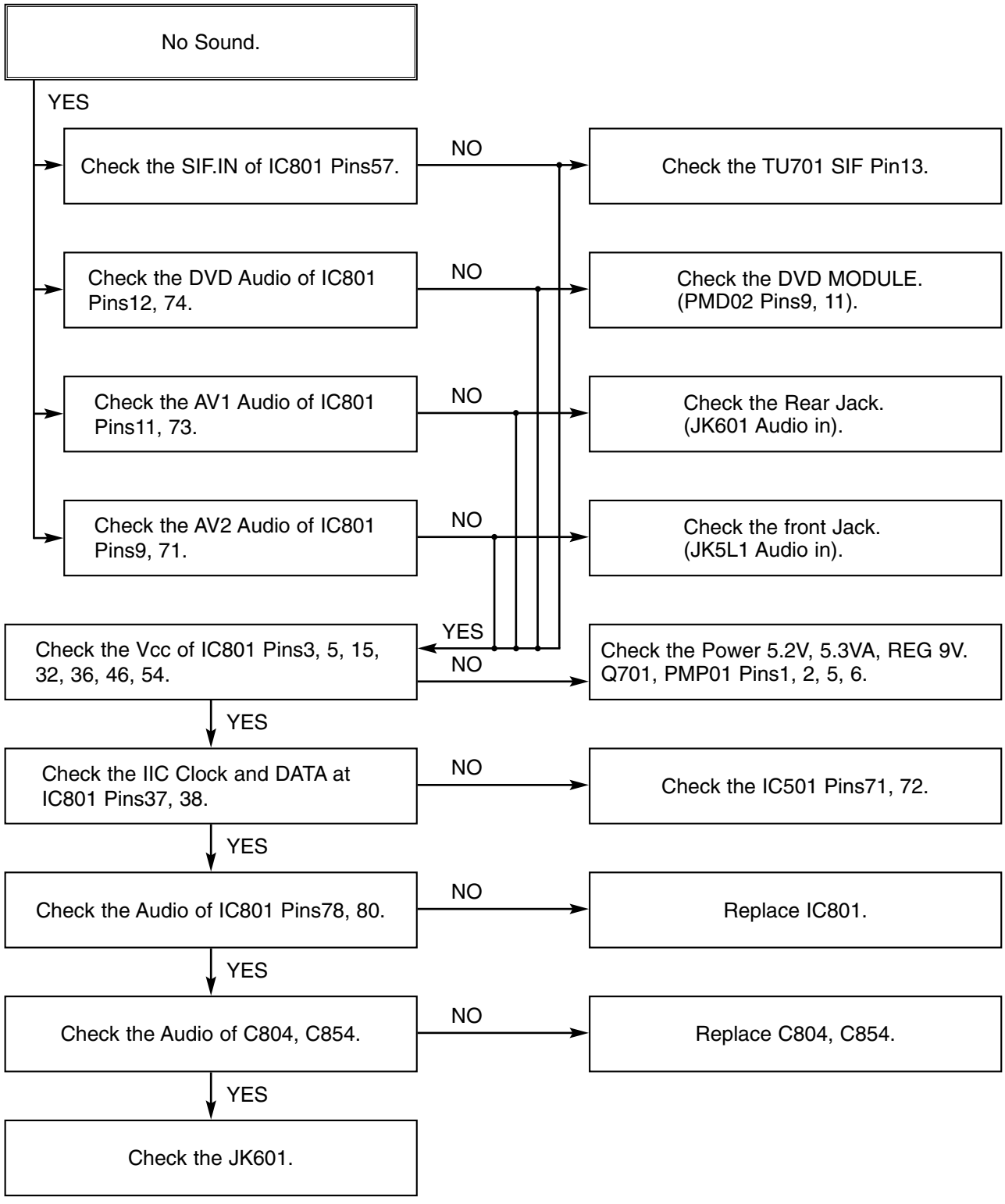

Is 5V applied to the IC301 Pins23, 44, 45, 52, 68, 77?
NO
Check the line of the REG 5V Line. (Power Circuit)
YES
Does the Color signal appear at the IC301 Pins41, 50?
NO
Is normal the X301 (3.58MHZ) of oscillation Frequency?
NO
Replace the X301.
YES
Does the Color signal appear at the IC301 Pin48?
NO
Check the C342, C341, R333.
YES
Replace the IC301.
Replace the IC301.

(4) When the Video signal doesn't appear on the screen in REC Mode,

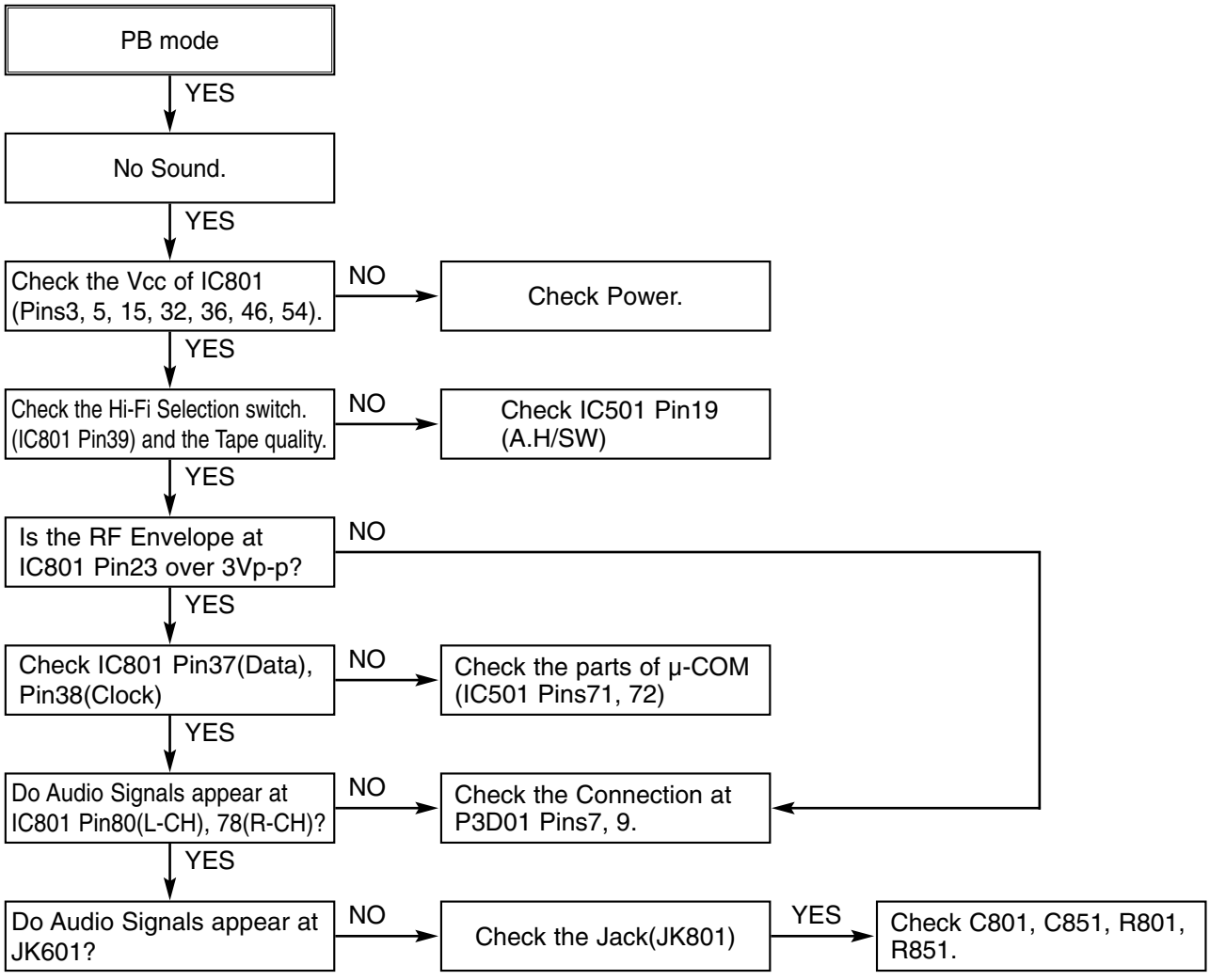


6. Hi-Fi CIRCUIT

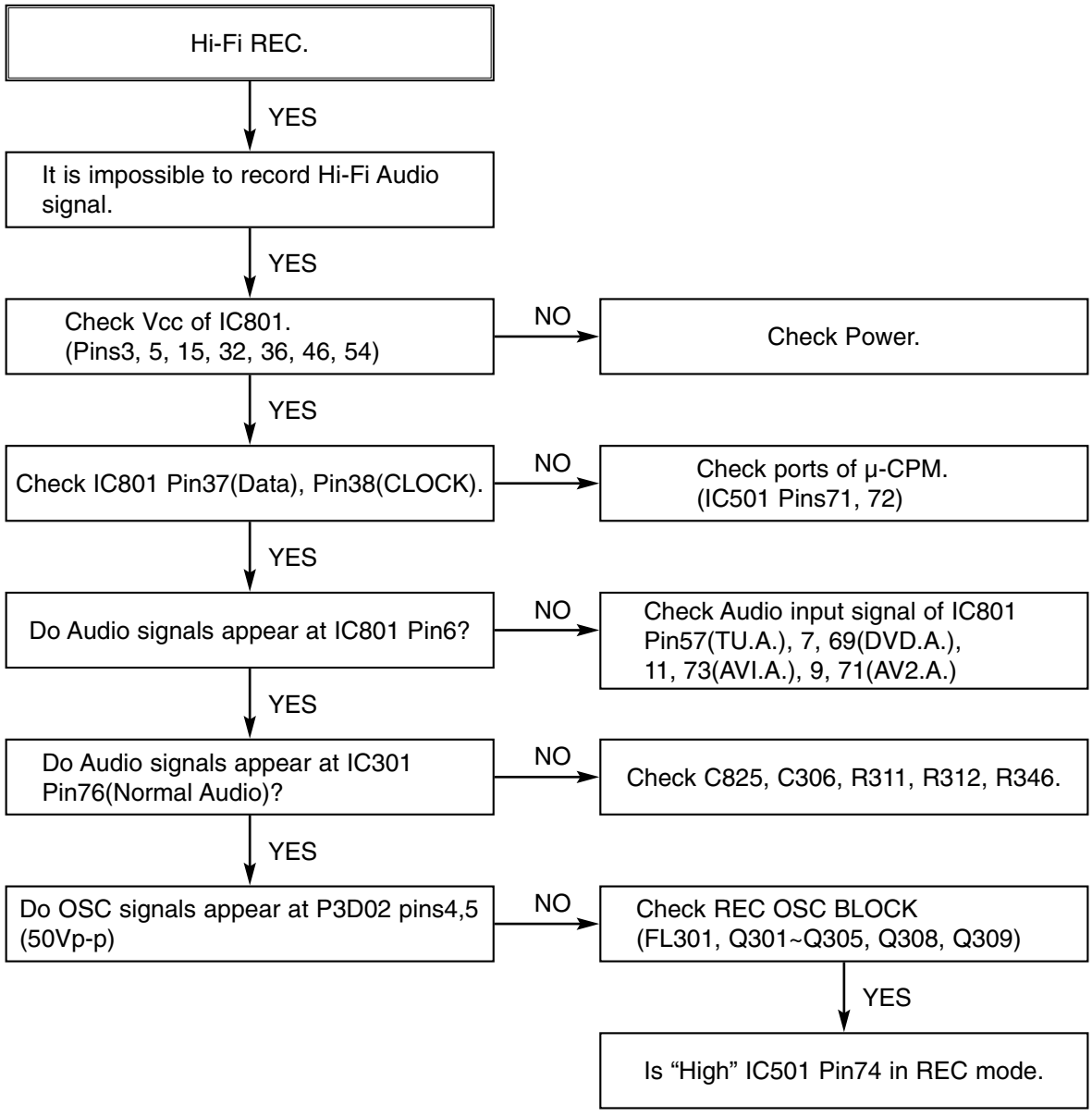
(1) No Sound(EE Mode)


No Sound.
YES
Check the SIF.IN of IC801 Pins57.
NO
Check the TU701 SIF Pin13.
Check the DVD Audio of IC801 Pins12, 74.
NO
Check the DVD MODULE. (PMD02 Pins9, 11).
Check the AV1 Audio of IC801 Pins11, 73.
NO
Check the Rear Jack. (JK601 Audio in).
Check the AV2 Audio of IC801 Pins9, 71.
NO
Check the front Jack. (JK5L1 Audio in).
Check the Vcc of IC801 Pins3, 5, 15, 32, 36, 46, 54.
YES
NO
Check the Power 5.2V, 5.3VA, REG 9V. Q701, PMP01 Pins1, 2, 5, 6.
YES
Check the IIC Clock and DATA at IC801 Pins37, 38.
NO
Check the IC501 Pins71, 72.
YES
Check the Audio of IC801 Pins78, 80.
NO
Replace IC801.
YES
Check the Audio of C804, C854.
NO
Replace C804, C854.
YES
Check the JK601.

(2) Hi-Fi Playback

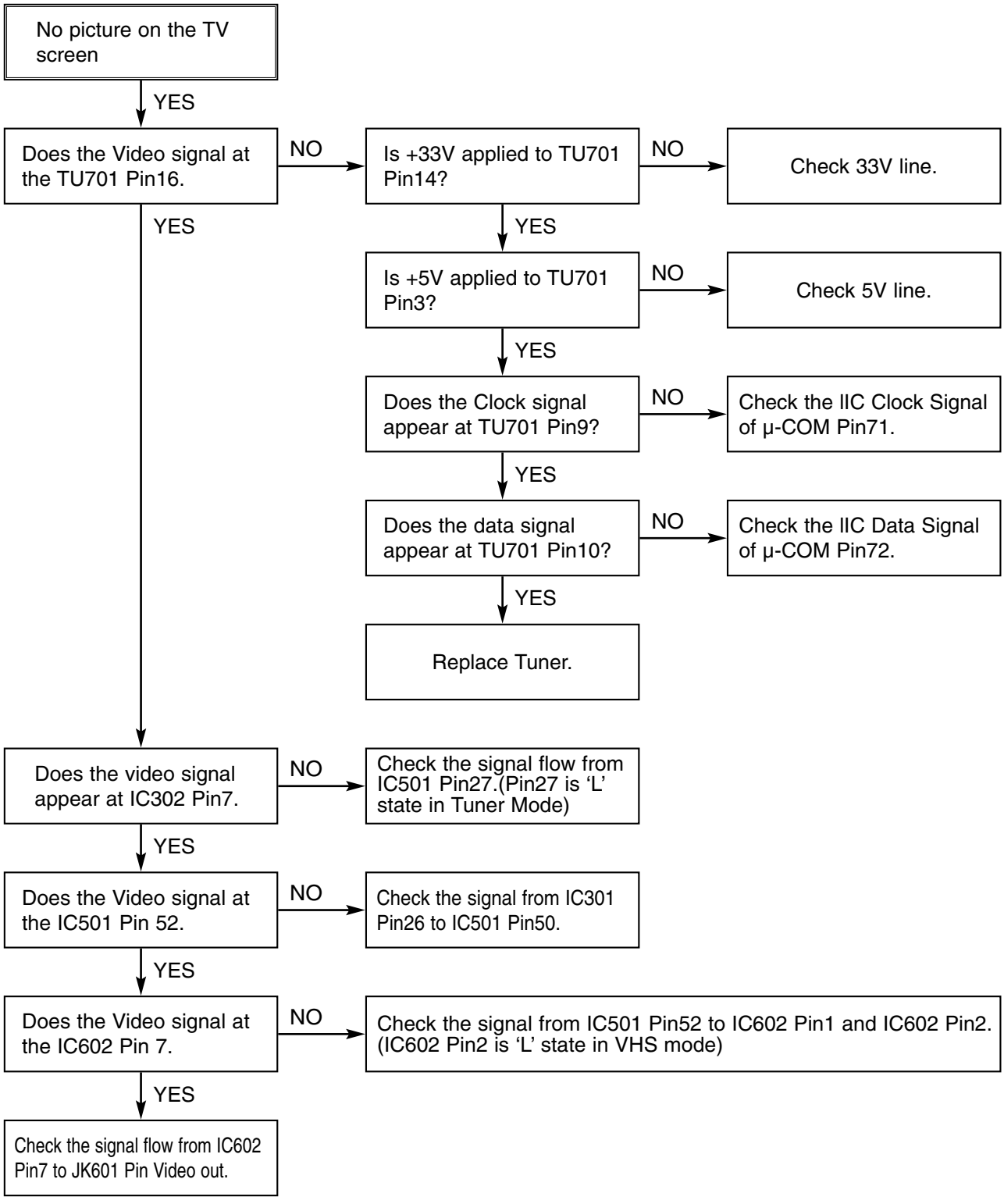


(3) Hi-Fi REC

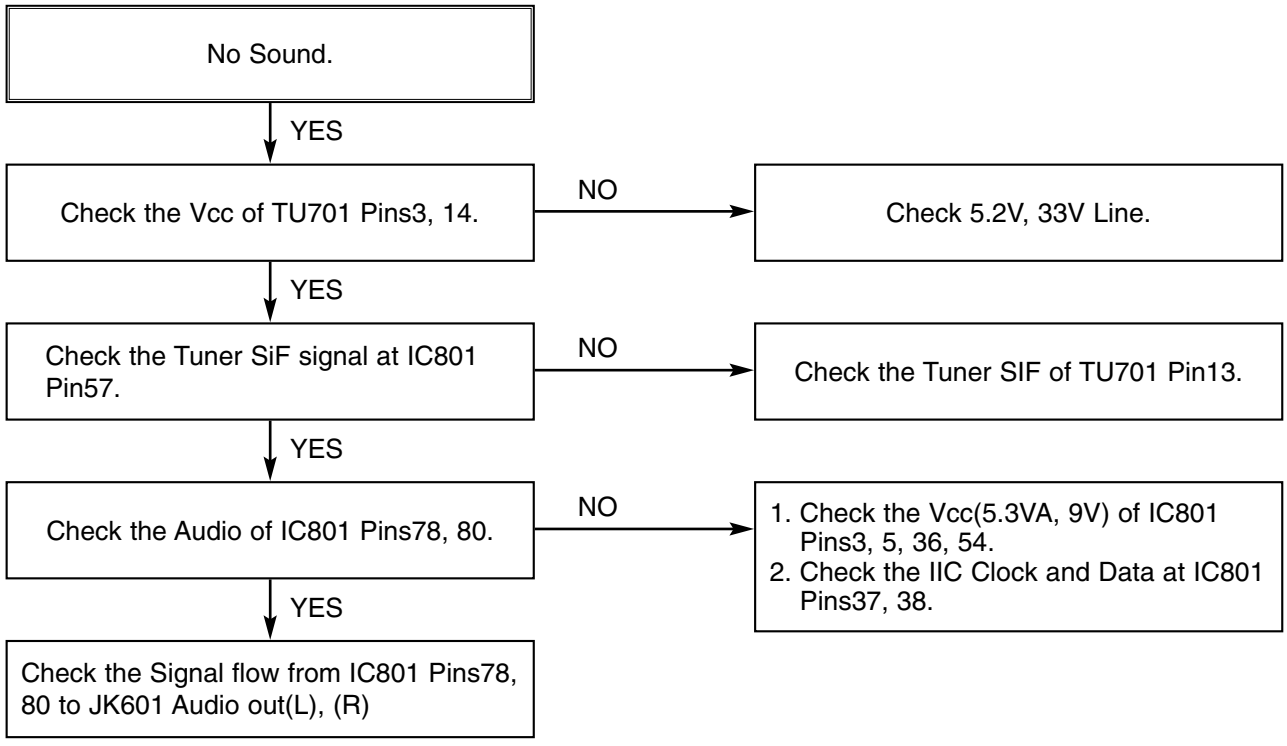

Hi-Fi REC.
YES
It is impossible to record Hi-Fi Audio signal.
YES
Check Vcc of IC801. (Pins3, 5, 15, 32, 36, 46, 54)
NO
Check Power.
YES
Check IC801 Pin37(Data), Pin38(CLOCK).
NO
Check ports of µ-CPM. (IC501 Pins71, 72)
YES
Do Audio signals appear at IC801 Pin6?
NO
Check Audio input signal of IC801 Pin57(TU.A.), 7, 69(DVD.A.), 11, 73(AVI.A.), 9, 71(AV2.A.)
YES
Do Audio signals appear at IC301 Pin76(Normal Audio)?
NO
Check C825, C306, R311, R312, R346.
YES
Do OSC signals appear at P3D02 pins4,5 (50Vp-p)
NO
Check REC OSC BLOCK (FL301, Q301~Q305, Q308, Q309)
YES
Is “High” IC501 Pin74 in REC mode.

7. Tuner/IF CIRCUIT

(1) No Picture on the TV screen

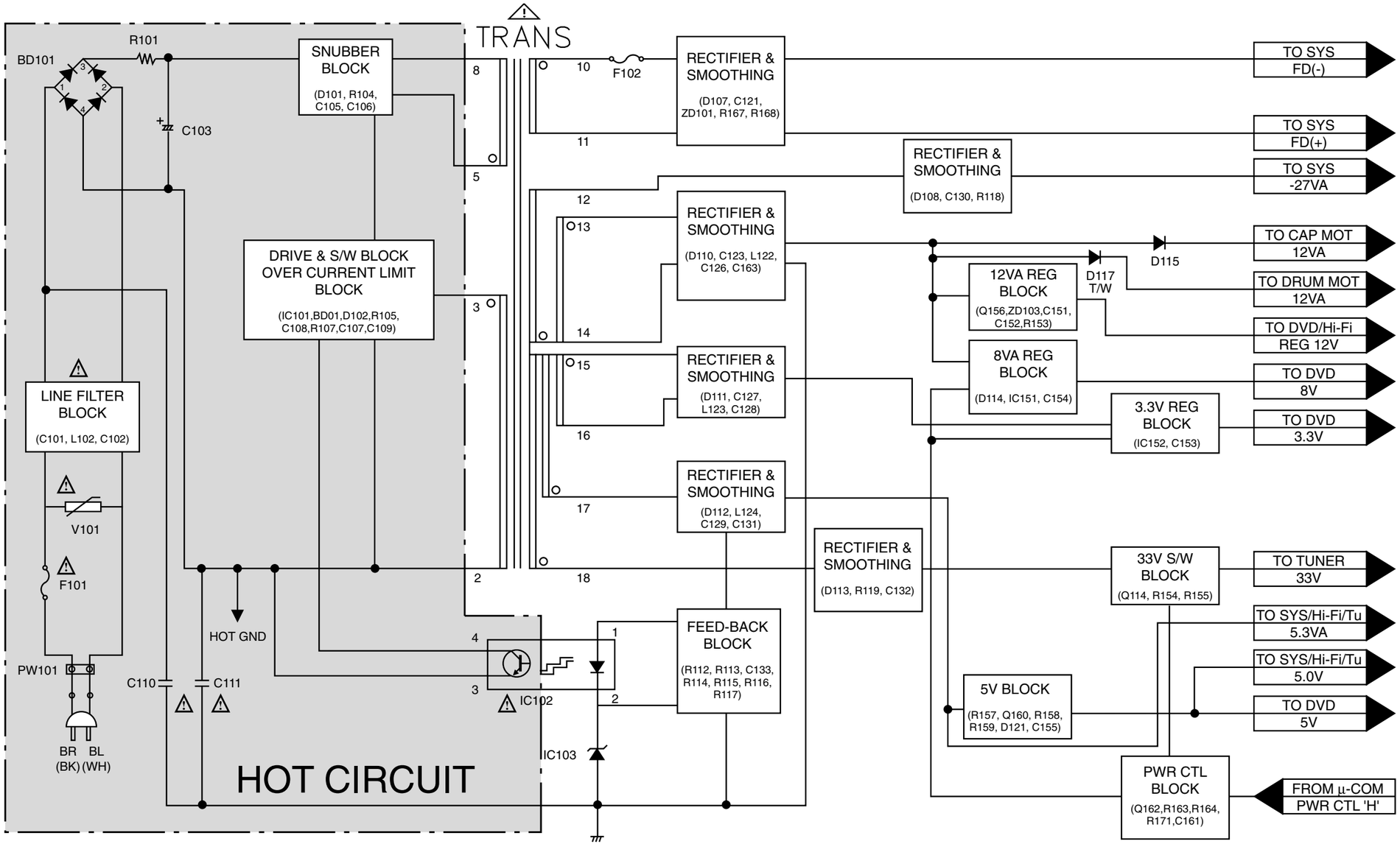

No picture on the TV screen
YES
Does the Video signal at the TU701 Pin16.
NO
Is +33V applied to TU701 Pin14?
NO
Check 33V line.
YES
YES
Is +5V applied to TU701 Pin3?
NO
Check 5V line.
YES
Does the Clock signal appear at TU701 Pin9?
NO
Check the IIC Clock Signal of µ-COM Pin71.
YES
Does the data signal appear at TU701 Pin10?
NO
Check the IIC Data Signal of µ-COM Pin72.
YES
Replace Tuner.
YES
Does the video signal appear at IC302 Pin7.
NO
Check the signal flow from IC501 Pin27.(Pin27 is 'L' state in Tuner Mode)
YES
Does the Video signal at the IC501 Pin 52.
NO
Check the signal from IC301 Pin26 to IC501 Pin50.
YES
Does the Video signal at the IC602 Pin 7.
NO
Check the signal from IC501 Pin52 to IC602 Pin1 and IC602 Pin2. (IC602 Pin2 is 'L' state in VHS mode)
YES
Check the signal flow from IC602 Pin7 to JK601 Pin Video out.

(2) No Sound


No Sound.
YES
Check the Vcc of TU701 Pins3, 14.
NO
Check 5.2V, 33V Line.
YES
Check the Tuner SiF signal at IC801 Pin57.
NO
Check the Tuner SIF of TU701 Pin13.
YES
Check the Audio of IC801 Pins78, 80.
NO
1. Check the Vcc(5.3VA, 9V) of IC801 Pins3, 5, 36, 54.
2. Check the IIC Clock and Data at IC801 Pins37, 38.
YES
Check the Signal flow from IC801 Pins78, 80 to JK601 Audio out(L), (R)

BLOCK DIAGRAMS

1. POWER(SMPS) BLOCK DIAGRAM

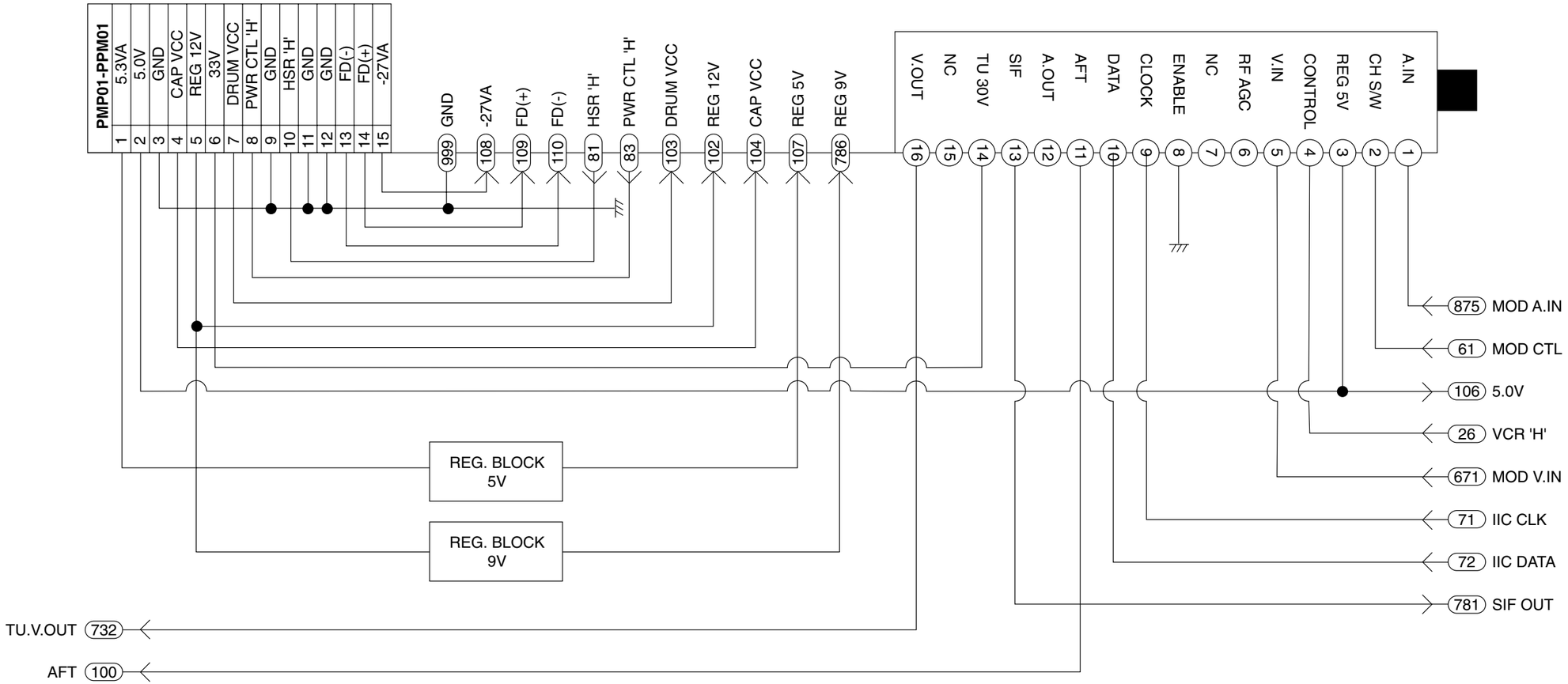


NOTES : Symbol denotes AC ground.

Symbol denotes DC chassis ground.

TOSHIBA

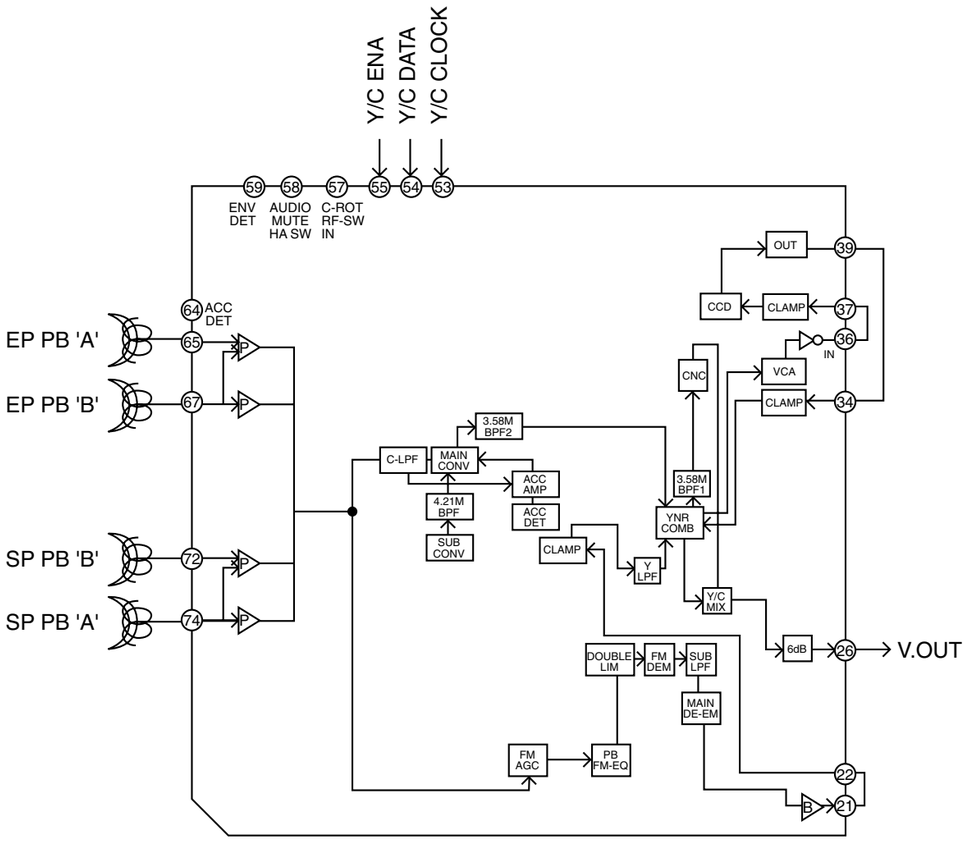
2. TU/IF BLOCK DIAGRAM



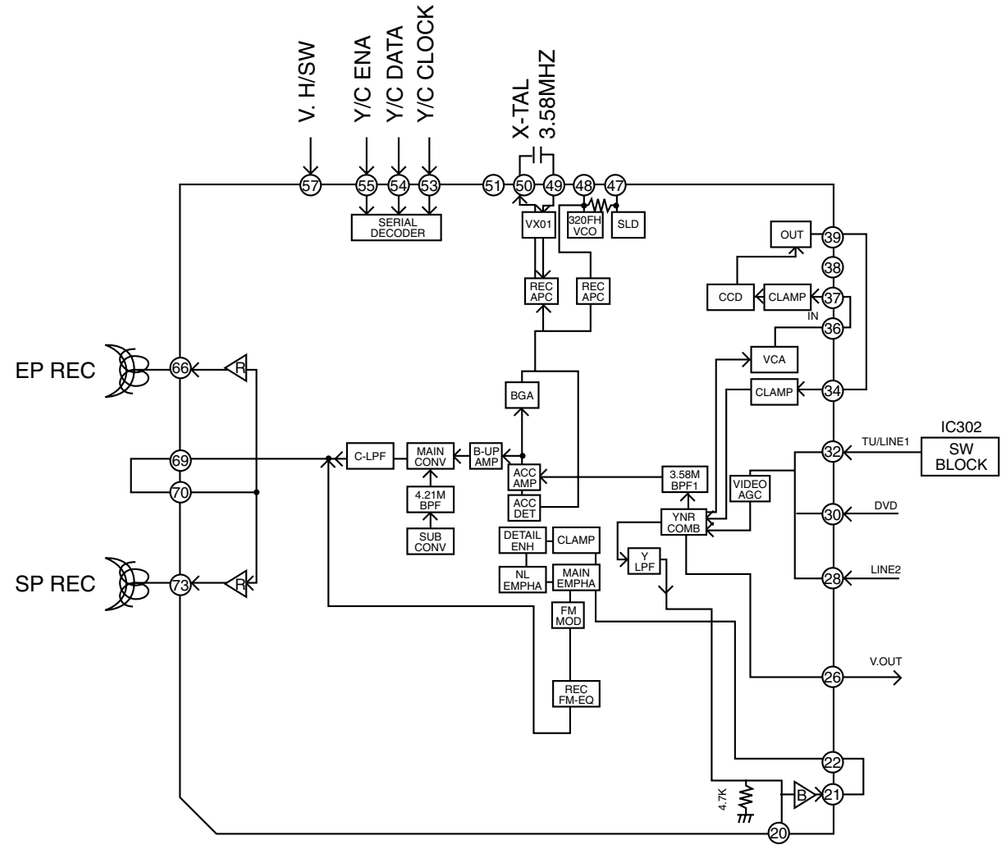
TOSHIBA

3. Y/C BLOCK DIAGRAM

(PB Mode)



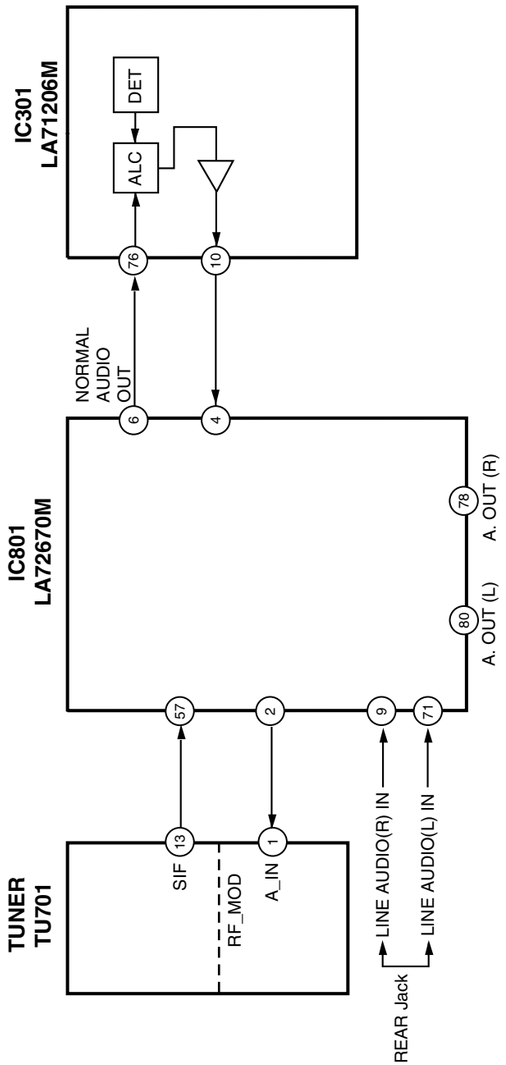
(REC Mode)



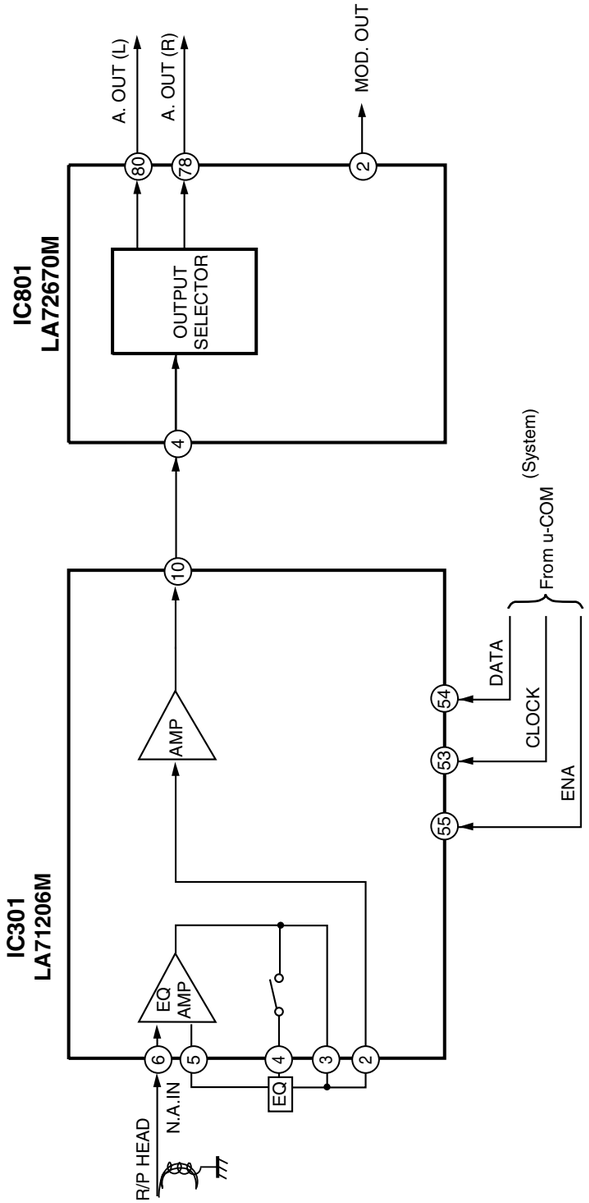
TOSHIBA

4. NORMAL AUDIO BLOCK DIAGRAM

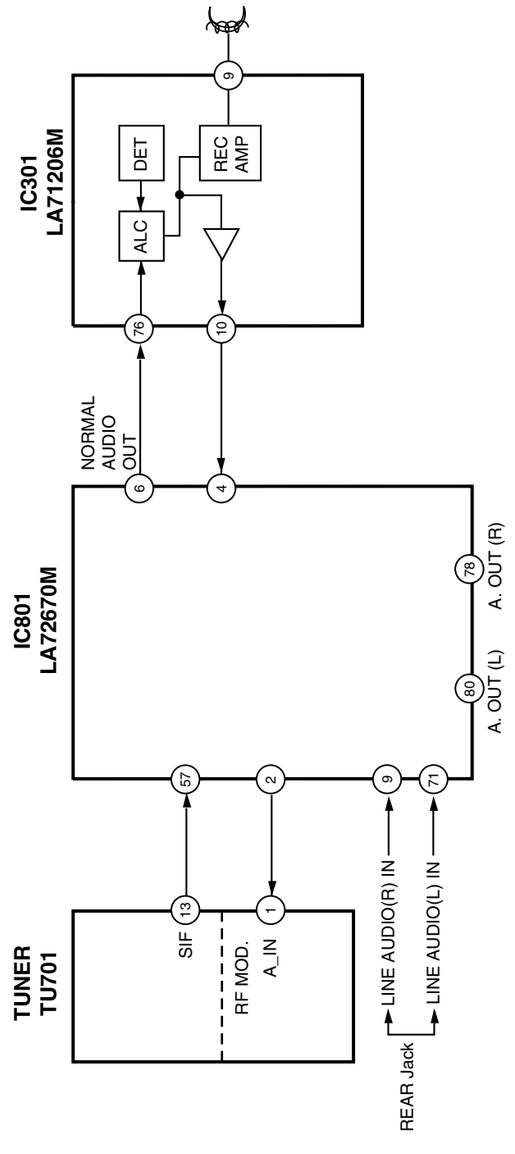
(EE Mode)



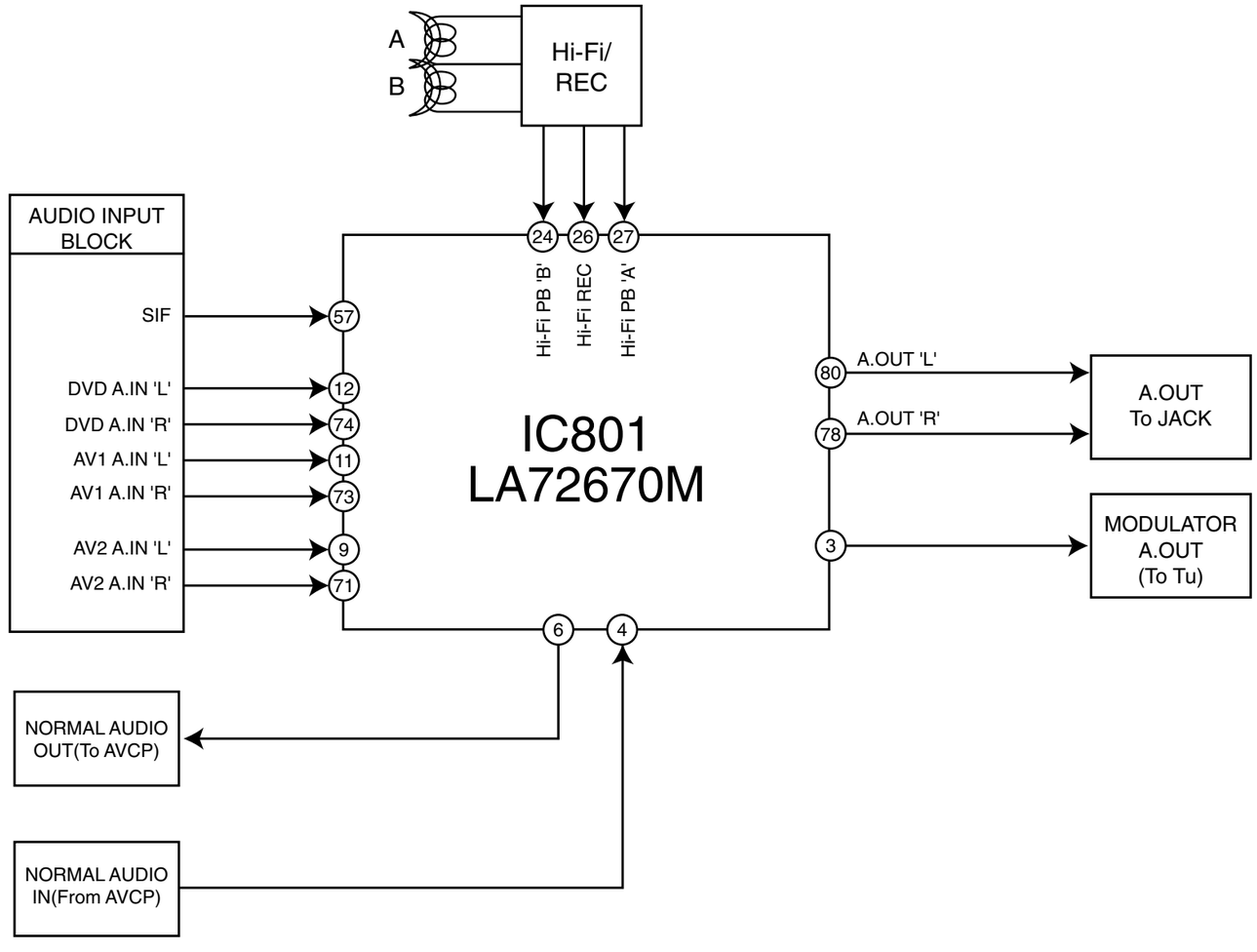
(PB Mode)



(REC Mode)

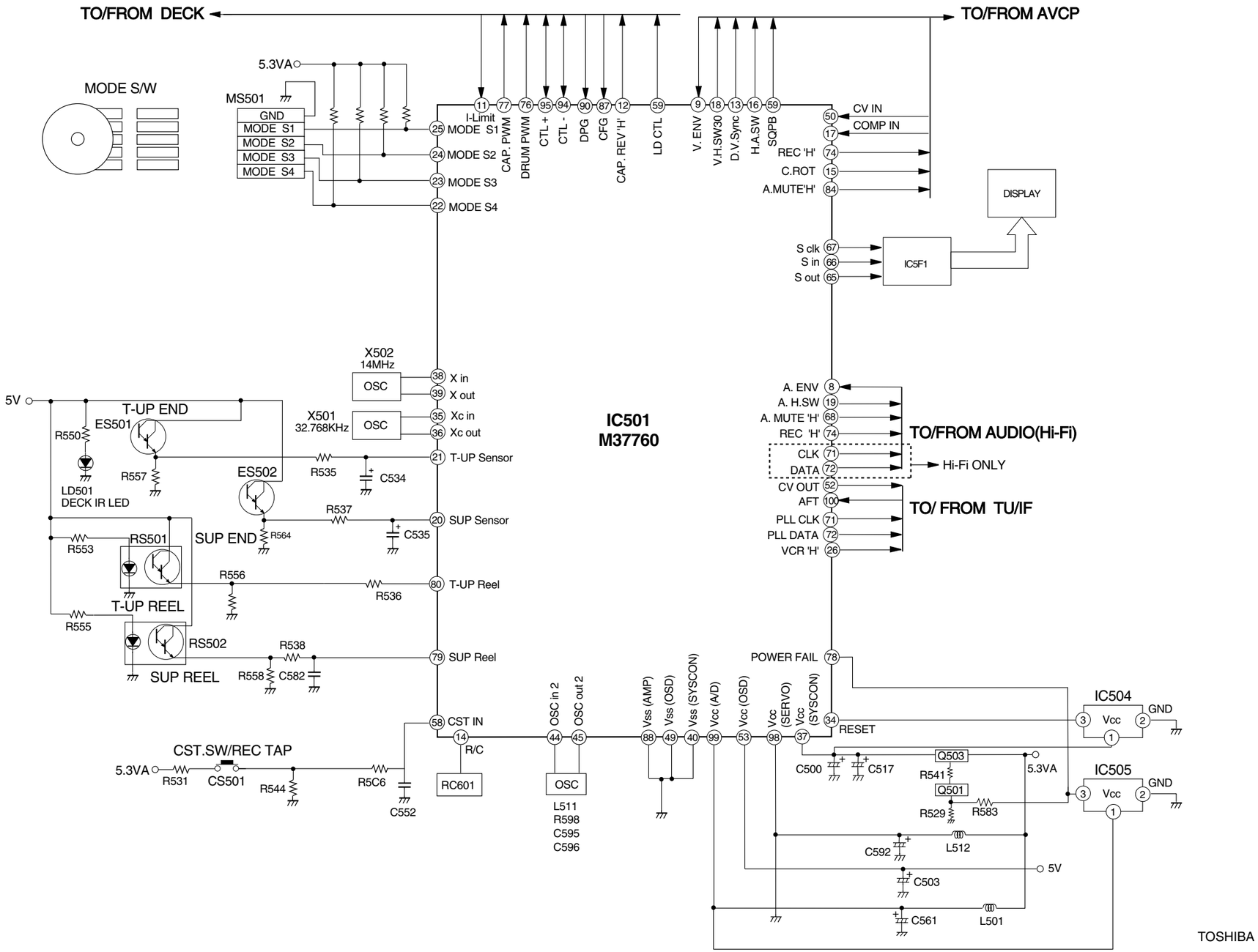


5. Hi-Fi BLOCK DIAGRAM



TOSHIBA

6. SYSTEM BLOCK DIAGRAM



TOSHIBA

CIRCUIT DIAGRAMS

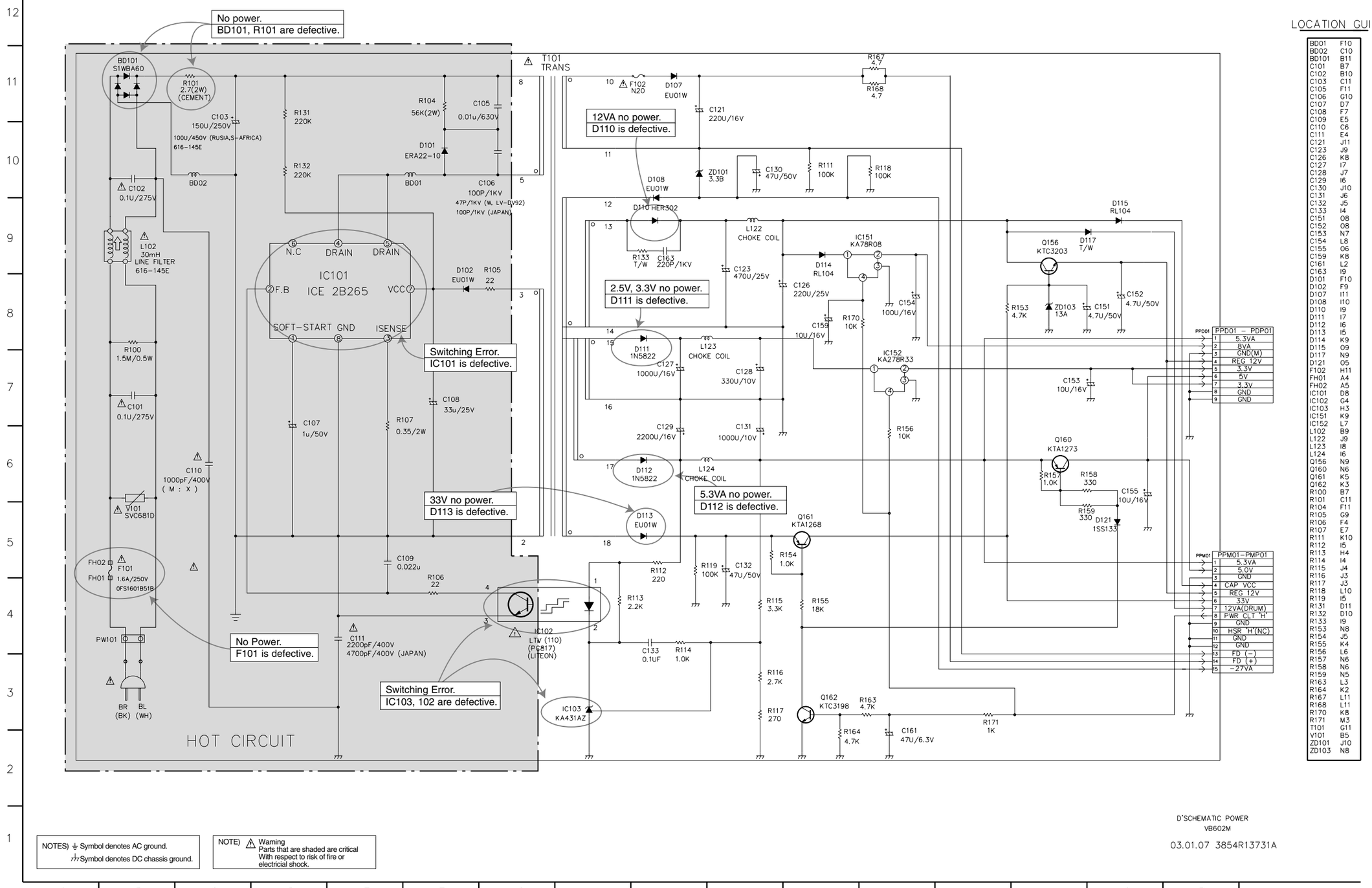
1. POWER(SMPS) CIRCUIT DIAGRAM

IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE TOSHIBA ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT. SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION.
THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

1. Shaded(■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.



LOCATION GUIDE

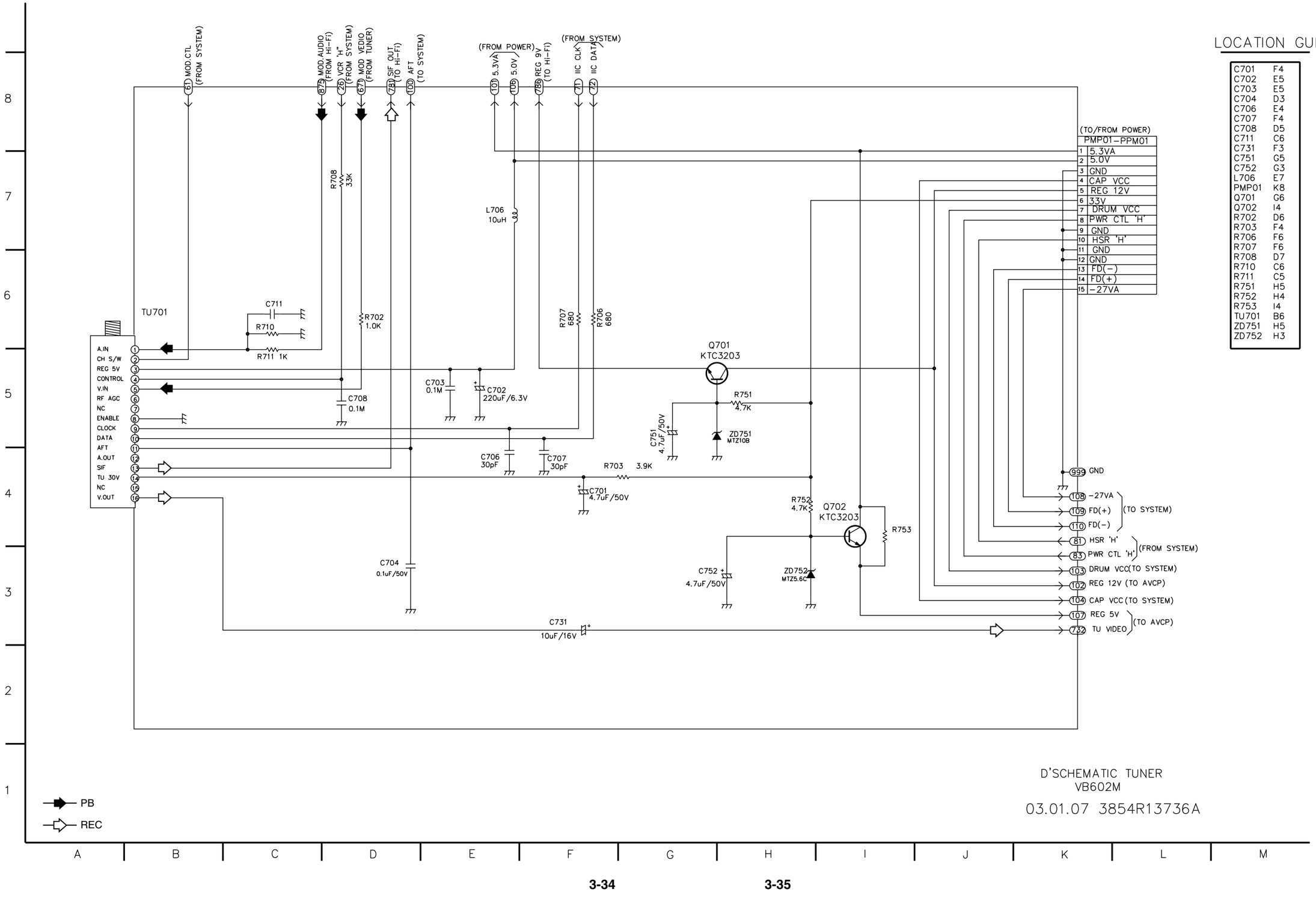
BD01	F10
BD02	C10
BD101	B11
C101	B7
C102	B10
C103	C11
C105	F11
C106	G10
C107	D7
C108	F7
C109	E5
C110	C6
C111	E4
C121	J11
C123	J9
C126	K8
C127	I7
C128	J7
C129	I6
C130	J10
C131	J6
C132	J5
C133	I4
C151	O8
C152	O8
C153	N7
C154	L8
C155	O6
C159	K8
C161	L2
C163	I9
D101	F10
D102	F9
D107	I11
D108	I10
D110	I9
D111	I7
D112	I6
D113	I5
D114	K9
D115	O9
D117	N9
D121	O5
F102	H11
FH01	A4
FH02	A5
IC101	D8
IC102	G4
IC103	H3
IC151	K9
IC152	L7
L102	B9
L122	J9
L123	I8
L124	I6
Q156	N9
Q160	N6
Q161	K5
Q162	K3
R100	B7
R101	C11
R104	F11
R105	G9
R106	F4
R107	E7
R111	K10
R112	I5
R113	H4
R114	I4
R115	J4
R116	J3
R117	J5
R118	L10
R119	I5
R131	D11
R132	D10
R133	I9
R153	N8
R154	J5
R155	K4
R156	L6
R157	N6
R158	N6
R159	N5
R163	L3
R164	K2
R167	L11
R168	L11
R170	K8
R171	M3
T101	G11
V101	B5
ZD101	J10
ZD103	N8

NOTES) ⏚ Symbol denotes AC ground.
⏚ Symbol denotes DC chassis ground.

NOTE) ⚠ Warning
Parts that are shaded are critical With respect to risk of fire or electricial shock.

D'SCHEMATIC POWER
VB602M
03.01.07 3854R13731A

2. TU/IF CIRCUIT DIAGRAM



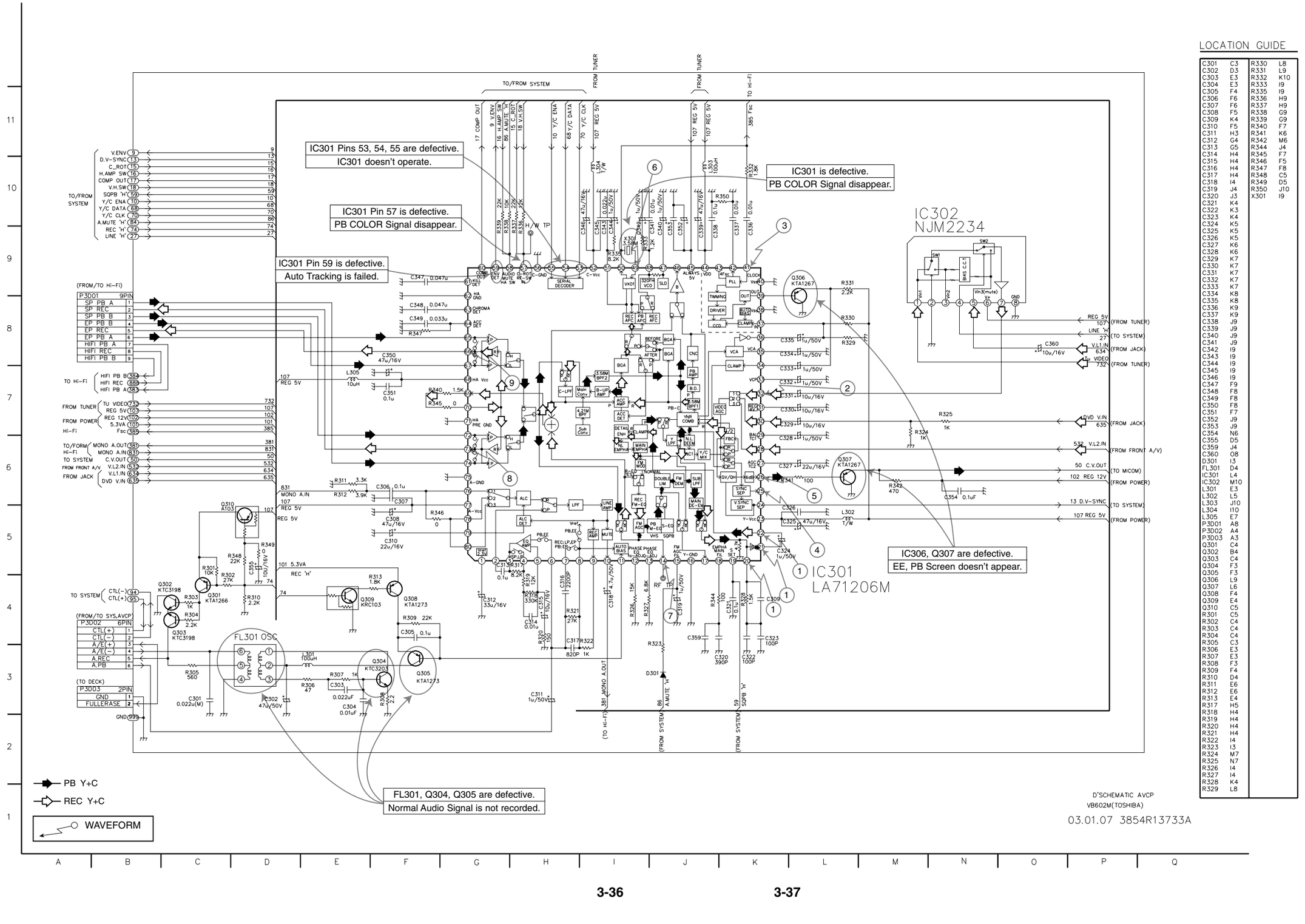
LOCATION GUIDE

C701	F4
C702	E5
C703	E5
C704	D3
C706	E4
C707	F4
C708	D5
C711	C6
C731	F3
C751	G5
C752	G3
L706	E7
PMP01	K8
Q701	G6
Q702	I4
R702	D6
R703	F4
R706	F6
R707	F6
R708	D7
R710	C6
R711	C5
R751	H5
R752	H4
R753	I4
TU701	B6
ZD751	H5
ZD752	H3

D'SCHEMATIC TUNER
VB602M

03.01.07 3854R13736A

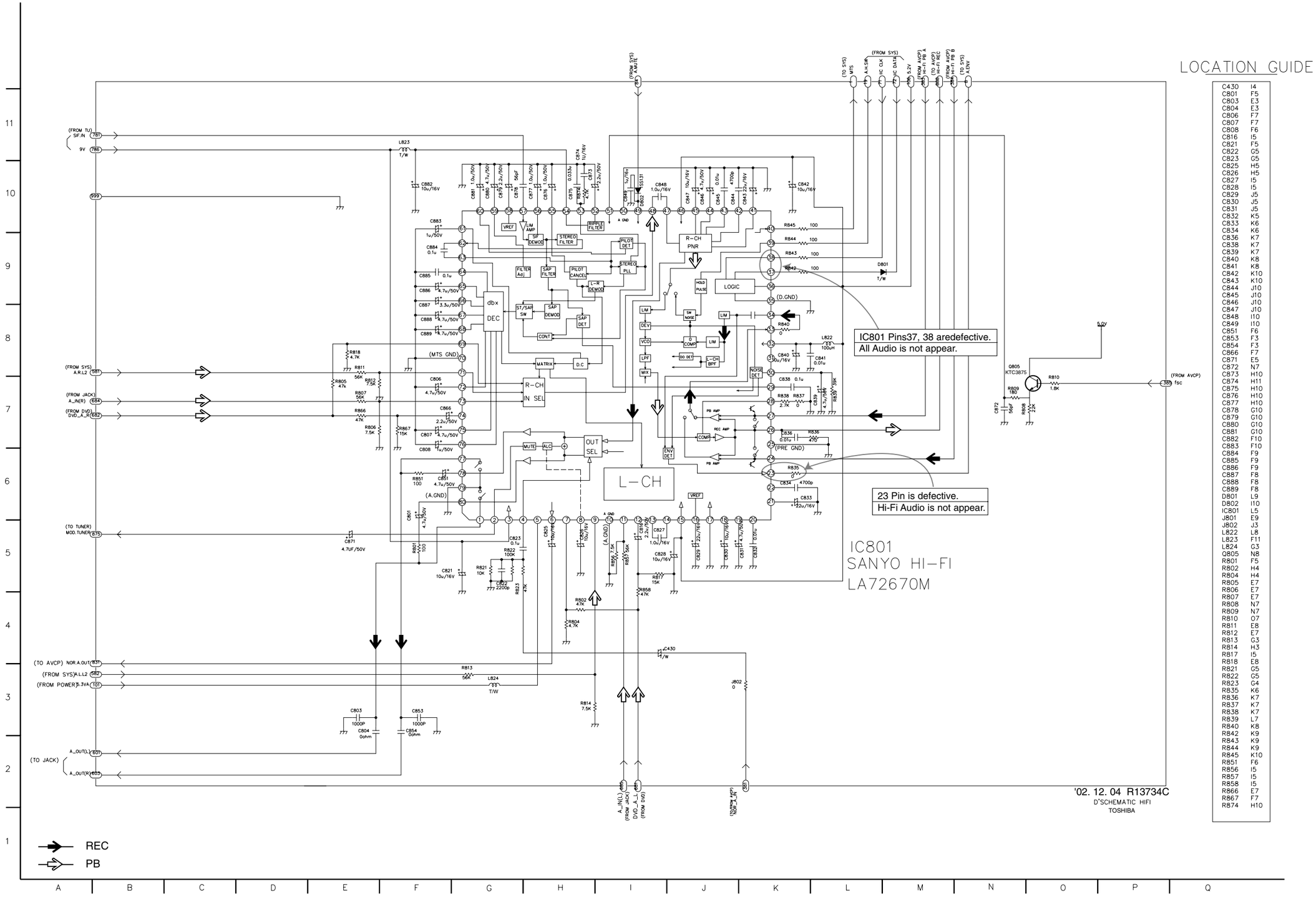
3. A/V CIRCUIT DIAGRAM



LOCATION GUIDE

C301	C3	R330	L8
C302	D3	R331	L9
C303	E3	R332	K10
C304	E3	R333	I9
C305	F4	R335	I9
C306	F6	R336	H9
C307	F6	R337	H9
C308	F5	R338	G9
C309	K4	R339	G9
C310	F5	R340	F7
C311	H3	R341	K6
C312	G4	R342	M6
C313	G5	R344	J4
C314	H4	R345	F7
C315	H4	R346	F5
C316	H4	R347	F8
C317	H4	R348	C5
C318	I4	R349	D5
C319	J4	R350	J10
C320	J3	X301	I9
C321	K4		
C322	K3		
C323	K4		
C324	K5		
C325	K5		
C326	K5		
C327	K6		
C328	K6		
C329	K7		
C330	K7		
C331	K7		
C332	K7		
C333	K7		
C334	K8		
C335	K8		
C336	K9		
C337	K9		
C338	J9		
C339	J9		
C340	J9		
C341	J9		
C342	I9		
C343	I9		
C344	I9		
C345	I9		
C346	I9		
C347	F9		
C348	F8		
C349	F8		
C350	F8		
C351	F7		
C352	J9		
C353	J9		
C354	N6		
C355	D5		
C359	J4		
C360	O8		
D301	I3		
FL301	D4		
IC301	L4		
IC302	M10		
L301	E3		
L302	L5		
L303	J10		
L304	I10		
L305	E7		
P3D01	A8		
P3D02	A4		
P3D03	A3		
Q301	C4		
Q302	B4		
Q303	C4		
Q304	F3		
Q305	F3		
Q306	L9		
Q307	L6		
Q308	F4		
Q309	E4		
Q310	C5		
R301	C5		
R302	C4		
R303	C4		
R304	C4		
R305	C3		
R306	E3		
R307	E3		
R308	F3		
R309	F4		
R310	D4		
R311	E6		
R312	E6		
R313	E4		
R317	H5		
R318	H4		
R319	H4		
R320	H4		
R321	H4		
R322	I4		
R323	I3		
R324	M7		
R325	N7		
R326	I4		
R327	I4		
R328	K4		
R329	L8		

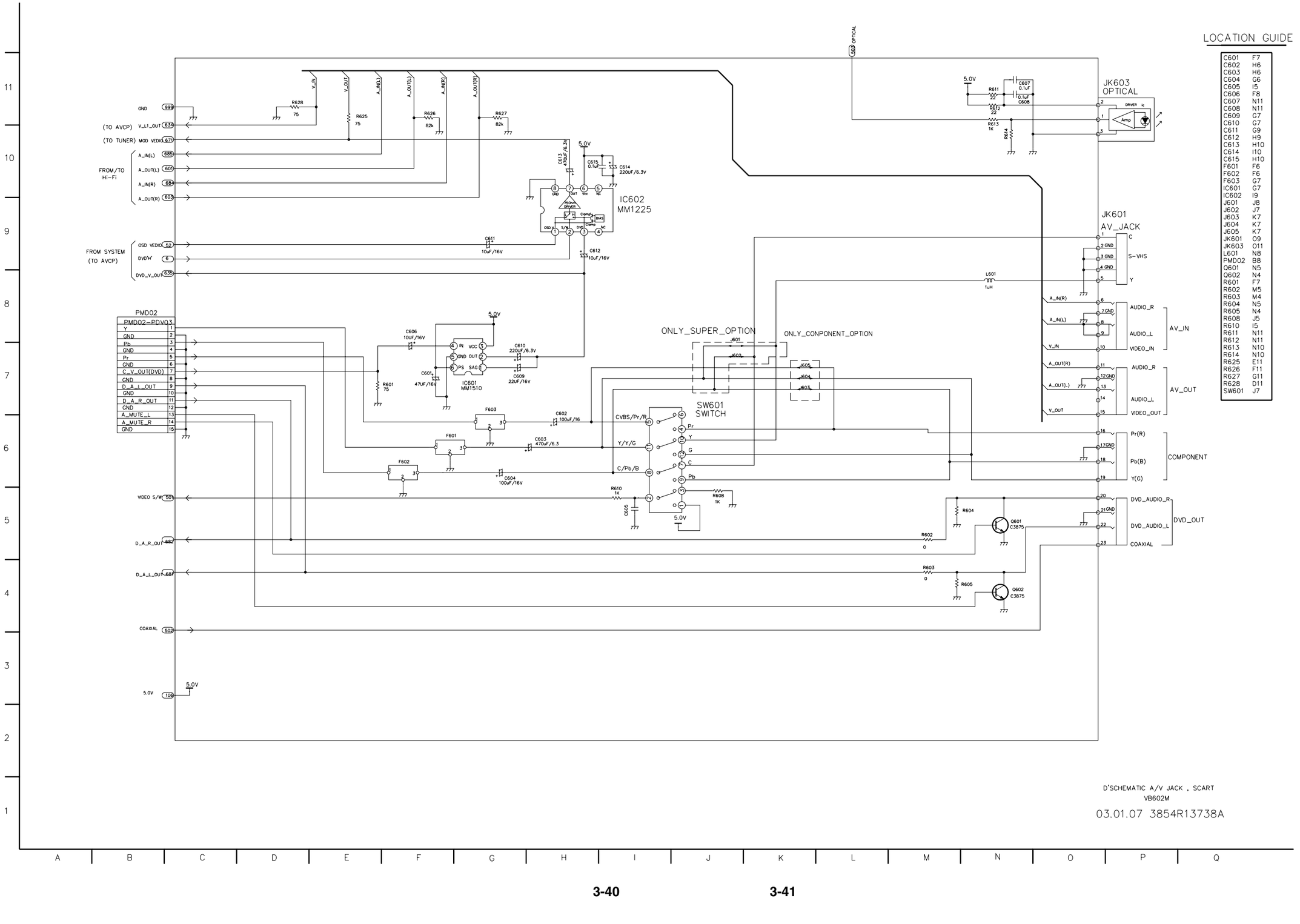
4. Hi-Fi CIRCUIT DIAGRAM



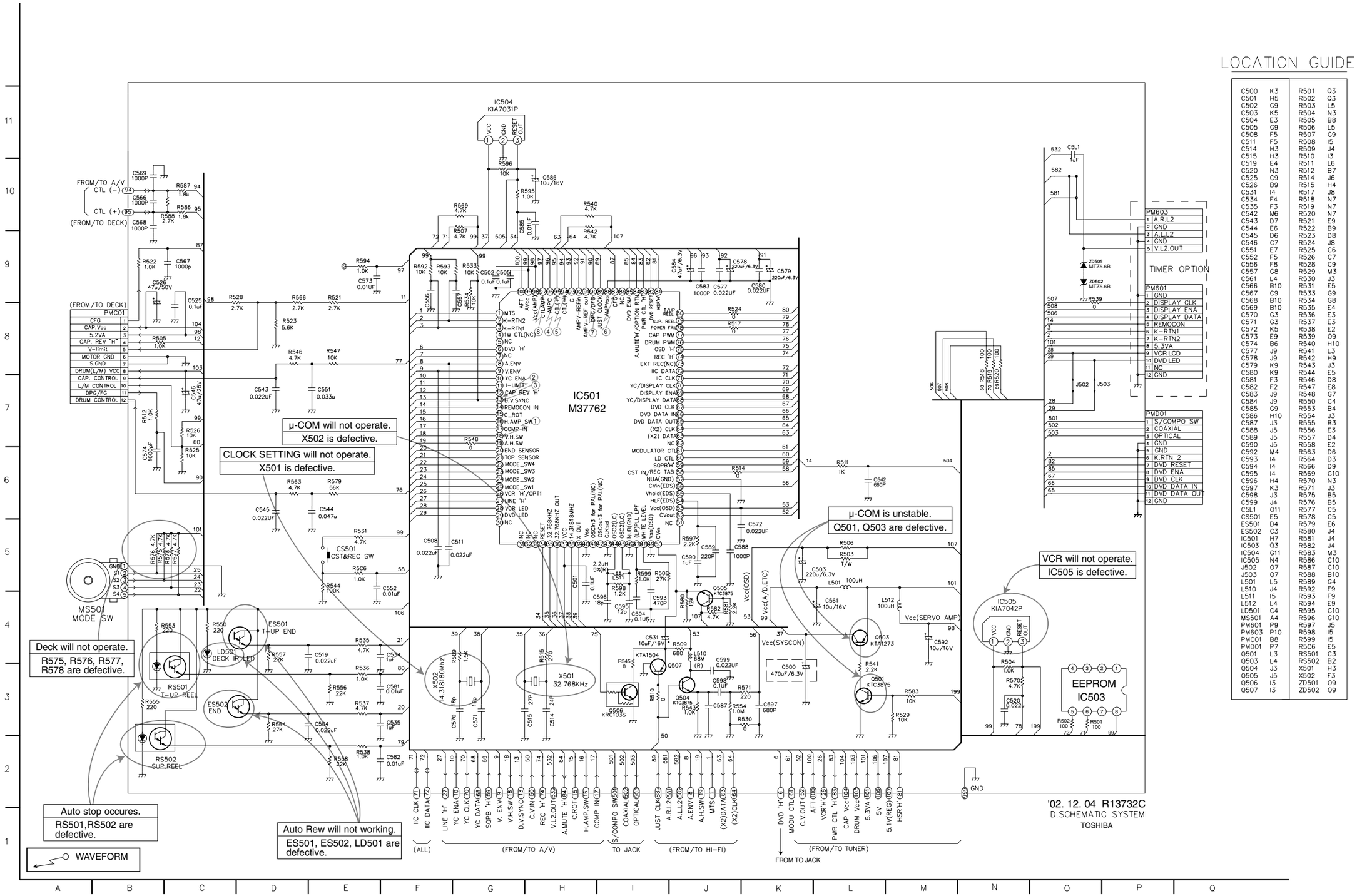
LOCATION GUIDE

C430	I4
C801	F5
C803	E3
C804	E3
C806	F7
C807	F7
C808	F6
C816	I5
C821	F5
C822	G5
C823	G5
C825	H5
C826	H5
C827	I5
C828	I5
C829	J5
C830	J5
C831	J5
C832	K5
C833	K6
C834	K6
C836	K7
C838	K7
C839	K7
C840	K8
C841	K8
C842	K10
C843	K10
C844	J10
C845	J10
C846	J10
C847	J10
C848	I10
C849	I10
C851	F6
C853	F3
C854	F3
C866	F7
C871	E5
C872	N7
C873	H10
C874	H11
C875	H10
C876	H10
C877	H10
C878	G10
C879	G10
C880	G10
C881	G10
C882	F10
C883	F10
C884	F9
C885	F9
C886	F9
C887	F8
C888	F8
C889	F8
D801	L9
D802	I10
IC801	L5
J801	E9
J802	J3
L822	L8
L823	F11
L824	G3
Q805	N8
R801	F5
R802	H4
R804	H4
R805	E7
R806	E7
R807	E7
R808	N7
R809	N7
R810	O7
R811	E8
R812	E7
R813	G3
R814	H3
R817	I5
R818	E8
R821	G5
R822	G5
R823	G4
R835	K6
R836	K7
R837	K7
R838	K7
R839	L7
R840	K8
R842	K9
R843	K9
R844	K9
R845	K10
R851	F6
R856	I5
R857	I5
R858	I5
R866	E7
R867	F7
R874	H10

5. JACK CIRCUIT DIAGRAM



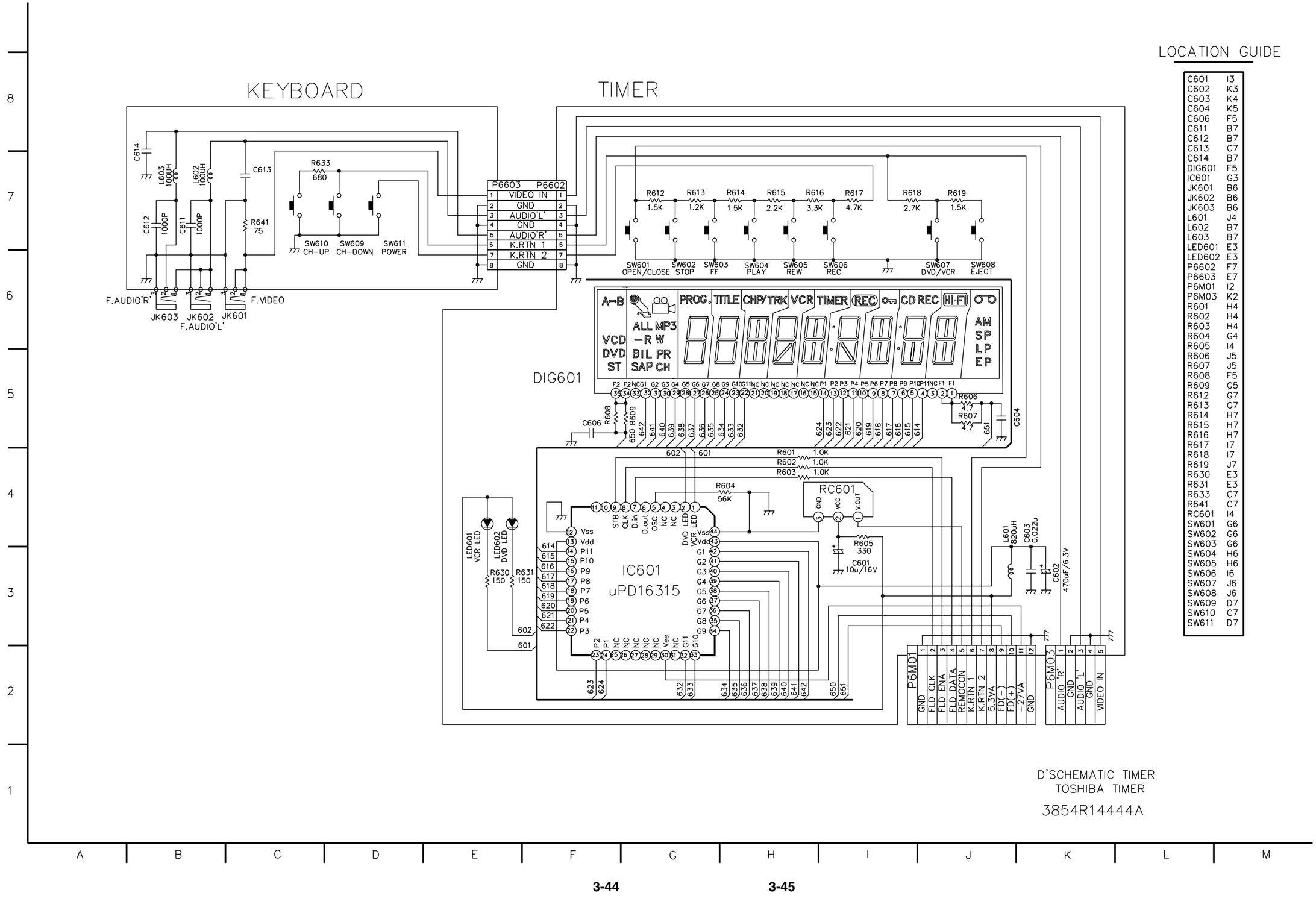
6. SYSTEM CIRCUIT DIAGRAM



LOCATION GUIDE

C500	K3	R501	Q3
C501	H5	R502	Q3
C502	G9	R503	L5
C503	K5	R504	N3
C504	E3	R505	B8
C505	G9	R506	L5
C508	F5	R507	G9
C511	F5	R508	I5
C514	H3	R509	J4
C515	H3	R510	I3
C519	E4	R511	L6
C520	N3	R512	B7
C525	C9	R514	J6
C526	B9	R515	H4
C531	I4	R517	J8
C534	F4	R518	N7
C535	F3	R519	N7
C542	M6	R520	N7
C543	D7	R521	E9
C544	E6	R522	B9
C545	D6	R523	D8
C546	C7	R524	J8
C551	E7	R525	C6
C552	F5	R526	C7
C556	F8	R528	C9
C557	G8	R529	M3
C561	L4	R530	J3
C566	B10	R531	E5
C567	C9	R533	G9
C568	B10	R534	G8
C569	B10	R535	E4
C570	G3	R536	E3
C571	G3	R537	E3
C572	K5	R538	E2
C573	E9	R539	O9
C574	B6	R540	H10
C577	J9	R541	L3
C578	J9	R542	H9
C579	K9	R543	J3
C580	K9	R544	E5
C581	F3	R546	D8
C582	F2	R547	E8
C583	J9	R548	G7
C584	J9	R550	C4
C585	G9	R553	B4
C586	H10	R554	J3
C587	J3	R555	B3
C588	J5	R556	E3
C589	J5	R557	D4
C590	J5	R558	E2
C592	M4	R563	D6
C593	I4	R564	D3
C594	I4	R566	D9
C595	I4	R569	G10
C596	H4	R570	N3
C597	K3	R571	J3
C598	J3	R575	B5
C599	J4	R576	B5
C5L1	O11	R577	C5
CS501	E5	R578	C5
ES501	D4	R579	E6
ES502	C3	R580	J4
IC501	H7	R581	J4
IC503	Q3	R582	J4
IC504	G11	R583	M3
IC505	N4	R586	C10
JS02	O7	R587	C10
JS03	O7	R588	B10
L501	L5	R589	G4
L510	J4	R592	F9
L511	I5	R593	F9
L512	L4	R594	E9
LD501	C4	R595	G10
MS501	A4	R596	G10
PM601	P9	R597	J5
PM603	P10	R598	I5
PMC01	B8	R599	I5
PMD01	P7	R5C6	E5
Q501	L3	RS501	C3
Q503	L4	RS502	B2
Q504	J3	X501	H3
Q505	J5	X502	F3
Q506	I3	ZD501	O9
Q507	I3	ZD502	O9

7. KEY CIRCUIT DIAGRAM



LOCATION GUIDE

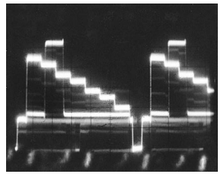
C601	I3
C602	K3
C603	K4
C604	K5
C606	F5
C611	B7
C612	B7
C613	C7
C614	B7
DIG601	F5
IC601	G3
JK601	B6
JK602	B6
JK603	B6
L601	J4
L602	B7
L603	B7
LED601	E3
LED602	E3
P6602	F7
P6603	E7
P6M01	I2
P6M03	K2
R601	H4
R602	H4
R603	H4
R604	G4
R605	I4
R606	J5
R607	J5
R608	F5
R609	G5
R612	G7
R613	G7
R614	H7
R615	H7
R616	H7
R617	I7
R618	I7
R619	J7
R630	E3
R631	E3
R633	C7
R641	C7
RC601	I4
SW601	G6
SW602	G6
SW603	G6
SW604	H6
SW605	H6
SW606	I6
SW607	J6
SW608	J6
SW609	D7
SW610	C7
SW611	D7

D'SCHEMATIC TIMER
TOSHIBA TIMER

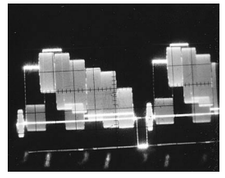
3854R14444A

• WAVEFORMS

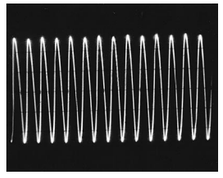
* IC301 Waveform

① 

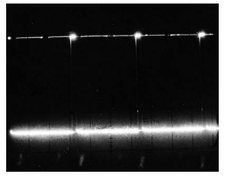
IC301 Pins 20, 21, 22
100mV/10msec DIV
VV/EE
20 Main DE Emphasis Filter
21 Main DE Emphasis out
22 Clamp in

② 

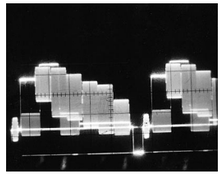
IC301 Pin 32
200mV/10msec DIV
EE
(VIDEO IN)

③ 

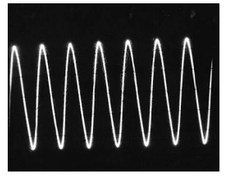
IC301 Pin 41
100mV/0.2msec DIV
REC/PB
(2fsc)

④ 

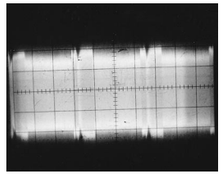
IC301 Pin 25
1.0V/20msec DIV
VV/EE
(C-SYNC OUT)

⑤ 

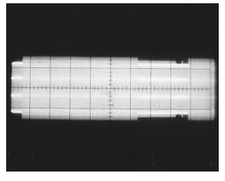
IC301 Pin 26
500mV/10msec DIV
VV/EE
(VIDEO OUT)

⑥ 

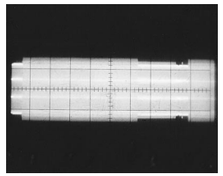
IC301 Pin 49
100mV/0.2msec DIV
PB/REC
(3.58MHz X-TAL IN)

⑦ 

IC301 Pin 14
100mV/5msec DIV
PB
(PB RF out)

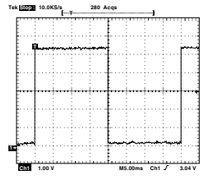
⑧ 

IC301 Pin 73
500mV/2msec DIV
SP REC
(REC RF)

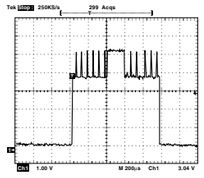
⑨ 

IC301 Pin 66
500mV/2msec DIV
EP REC
(REC RF)

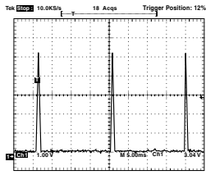
* IC501 Waveform

① 

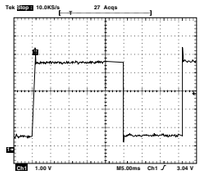
IC501 Pin 18
REC/PB

② 

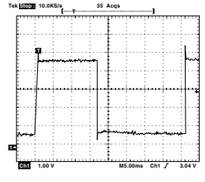
IC501 Pin 13
QUE/REV

③ 

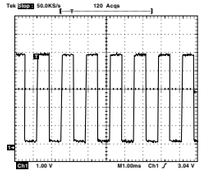
IC501 Pin 13
QUE/REV

④ 

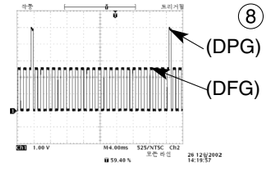
IC501 Pin 95
REC

⑤ 

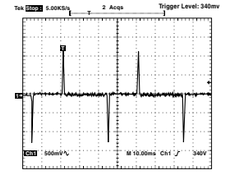
IC501 Pin 94
REC

⑥ 

IC501 Pin 87
REC/PB

⑦ 

IC501 Pin 90
REC/PB
(DPG/DFG)

⑧ 

IC501 Pin 97
PB
(CTL OUT)

• CIRCUIT VOLTAGE CHART

MODE / PIN NO.	EE	PLAY
IC301		
1	2.3	2.31
2	2.29	2.28
3	2.29	2.28
4	2.29	2.28
5	2.31	2.29
6	2.3	2.31
7	0	2.31
8	2.31	2.32
9	2.31	2.31
10	2.25	2.27
11	4.93	4.93
12	1	1
13	0.97	0.97
14	1.92	1.89
15	1.55	1.53
16	0	0
17	2.37	2.55
18	2.39	1.45
19	0	0
20	2.46	2.49
21	1.73	1.79
22	3.07	2.29
23	4.96	4.95
24	0	0
25	0.36	0.35
26	1.83	1.87
27	1.47	1.6
28	2.25	2.56
29	2.32	2.31
30	2.25	2.26
31	4.08	4.08
32	2.25	2.26
33	3.62	2.8
34	2.97	2.93
35	3.13	3.14
36	2.37	2.37
37	2.35	2.29
38	0	0
39	1.82	1.87
40	0	0
41	0.83	0.83
42	2.34	2.37
43	0	0
44	4.92	4.92
45	4.95	4.95
46	2.27	3.17
47	3.31	3.31
48	3.32	3.32
49	3.94	3.94
50	2.54	2.55
51	2.12	2.09
52	4.95	4.95
53	4.75	4.62
54	4.7	4.52

MODE / PIN NO.	EE	PLAY
55	0.68	0.93
56	0	0
57	0	2.56
58	0	1.61
59	0	2.9
60	4.91	0.94
61	2.92	1.94
62	0	0
63	3.96	3.98
64	1.76	1.72
65	1.84	1.85
66	1.84	1.86
67	1.84	1.86
68	4.93	4.93
69	0.18	0
70	0.15	0
71	0	0
72	1.82	0.71
73	1.82	0.71
74	1.82	0.71
75	0	0
76	2.3	2.3
77	4.96	4.96
78	2.3	2.3
79	0	0
80	2.3	2.3
IC302		
1	2.96	2.96
2	0	0
3	3.01	3
4	5.12	5.12
5	2.95	2.95
6	4.97	4.97
7	2.2	2.2
8	0	0
IC501		
1	0.97	0
2	5.17	5.17
3	5.17	5.16
4	0	0
5	0.5	0.54
6	0	0
7	0.4	0.42
8	0.19	4.06
9	0.29	3.91
10	0.68	0.99
11	0	3.42
12	0	0
13	0	0
14	4.78	4.78
15	0	2.57
16	0	0
17	0.68	0.43
18	2.56	2.57
19	2.57	2.57

MODE / PIN NO.	EE	PLAY
20	0	0
21	0.11	0.11
22	5.17	5.17
23	]5.17	5.17
24	5.17	5.17
25	0	0
26	5.13	5.13
27	5.13	5.17
28	5.13	5.13
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	5.15	5.15
35	1.52	1.51
36	1.43	1.44
37	5.15	5.15
38	2.19	2.18
39	2.28	2.27
40	0	0
41	0.51	0.55
42	0.26	0.55
43	0.26	0
44	2.35	2.34
45	2.41	2.41
46	0	0
47	1.29	0
48	0	0
49	0	0
50	1.88	1.99
51	0.53	0.57
52	1.88	1.98
53	4.96	4.95
54	2.03	2.03
55	2.6	1.92
56	1.96	2.05
57	0	0
58	0	0
59	0	0
60	2.57	2.58
61	0	4.28
62	0	0
63	0	0
64	0	0
65	0.97	0.86
66	2.38	0
67	5.07	5.07
68	4.7	4.45
69	5.02	4.97
70	4.75	4.61
71	5.17	5.17
72	5.17	5.17
73	0	0
74	0	0

MODE / PIN NO.	EE	PLAY
75	0	0
76	0	1.79
77	0	2.72
78	0	4.76
79	0	0
80	0	0
81	0	0
82	4.94	4.94
83	5.03	4.98
84	0	0
85	2.69	2.67
86	0.58	0.68
87	0.17	2.36
88	0	0
89	0.54	0
90	0.1	1.36
91	2.53	2.54
92	2.54	2.53
93	0.21	0
94	2.5	2.49
95	2.5	2.49
96	2.52	2.52
97	2.52	2.52
98	5.08	5.08
99	5.17	5.17
100	2.64	1.95
IC504		
1	5.19	5.19
2	0	0
3	5.14	5.14
IC505		
1	5.19	5.19
2	0	0
3	4.7	4.7
IC601		
1	1.93	1.93
2	2.01	2.01
3	5.05	5.05
4	1.7	1.7
5	0	0
6	5.05	5.05
IC602		
1	2.51	2
2	0	0
3	2.27	2.35
4	0	0
5	0	0
6	5.06	5.06
7	2.53	2.04
8	0	0
IC801		
1	0	0
2	2.56	2.54
3	9.21	9.18
4	2.48	2.48

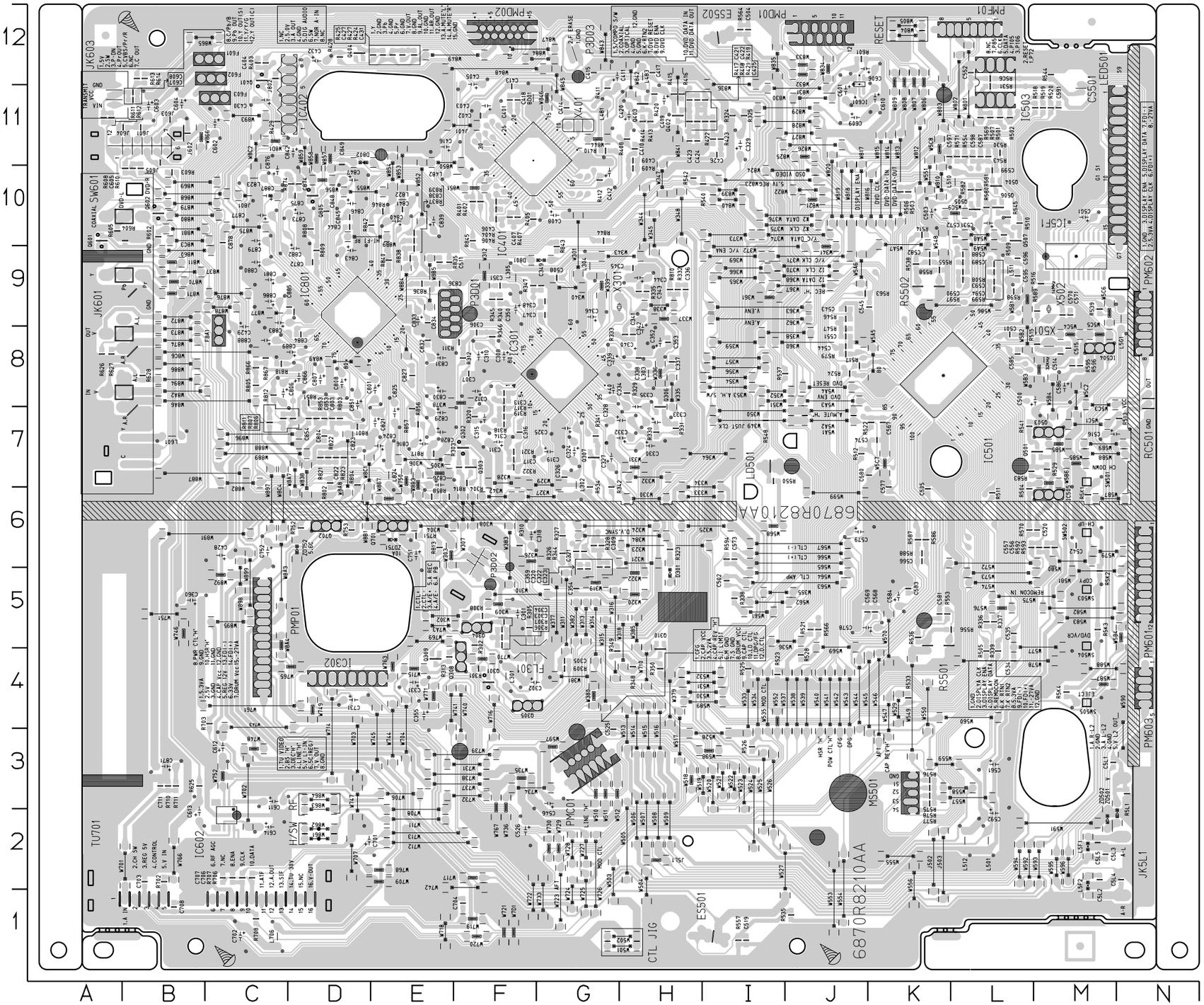
MODE / PIN NO.	EE	PLAY
5	5.19	5.19
6	1.91	2.07
7	0	0
8	0.29	1.31
9	0	0
10	0	0
11	0	0
12	2.5	2.5
13	1.91	2.44
14	2.49	2.49
15	5.06	5.05
16	2.51	2.51
17	0	0
18	0	0.86
19	2.51	2.44
20	2.52	2.45
21	2.52	2.43
22	2.51	2.42
23	0.19	3.66
24	2.25	2.3
25	0	0
26	2.24	2.3
27	2.25	2.3
28	0	0
29	2.48	0.11
30	0	1.34
31	2.51	3.79
32	5.02	5.01
33	2.64	2.65
34	2.64	2.64
35	0	0
36	5.06	5.05
37	5.17	5.05
38	5.17	5.17
39	0	2.57
40	0.19	0
41	2.52	2.45
42	2.51	2.43
43	2.52	2.45
44	2.52	2.45
45	0	0.25
46	5.06	5.05
47	2.49	2.49
48	1.9	2.42
49	0	0
50	0	0
51	2.05	2.06
52	1.22	0
53	3.86	0.25
54	9.2	9.19
55	6.26	0.28
56	1.96	0.29
57	2.2	2.15
58	4.56	0
59	2.52	2.35

MODE / PIN NO.	EE	PLAY
60	3.86	0.23
61	3.15	0.24
62	4.02	0
63	3.83	0
64	2.45	0
65	3.87	0.32
66	4.09	0.32
67	3.88	0.31
68	3.94	0.31
69	0	0
70	0	0
71	0	0
72	3.86	0.31
73	0	0
74	2.5	2.5
75	3.87	0.4
76	3.17	0.22
77	0	0
78	4.42	4.3
79	0	0
80	4.4	4.3
SW601		
1	5.06	5.07
2	5.06	5.07
3	0	0
4	0.1	0.73
5	0.1	0.73
6	0.13	0
7	0	0.26
8	0.76	0.77
9	0.76	0.76
10	0	0
11	0	0
12	0	0

Location No.	Base		Emitter		Collector	
	EE	PB	EE	PB	EE	PB
Q301	4.26	4.26	4.97	4.96	4.907	4.91
Q302	0.758	1.74	0	0	0	0
Q303	0.734	0.72	0	0	0	0
Q304	0	0	0	0	0	0
Q305	4.92	4.92	4.94	4.93	0	0
Q306	1.828	1.86	2.45	2.5	0	0
Q307	1.843	2.05	2.51	2.62	0	0
Q308	5.19	5.19	4.87	4.91	4.93	4.92
Q309	0	0	0	0	4.91	4.97
Q501	0.68	0.68	0	0	0	0
Q503	5.17	5.17	4.48	4.48	5.15	5.15
Q504	2.82	2.94	2.18	2.27	4.95	4.95
Q505	1.58	1.58	1.03	2.24	4.96	4.96
Q506	5.07	0	0	0	0	3.29
Q507	2.8	2.6	0	3.23	0	0
Q805	2.56	2.56	2.08	2.08	5.06	5.05
Q701	9.02	9.24	9.82	9.81	12.58	12.99
Q702	4.98	4.97	5.7	5.7	5.19	5.19
Q601	0.75	0.75	0	0	0	0
Q602	0.75	0.75	0	0	0	0

PRINTED CIRCUIT DIAGRAMS

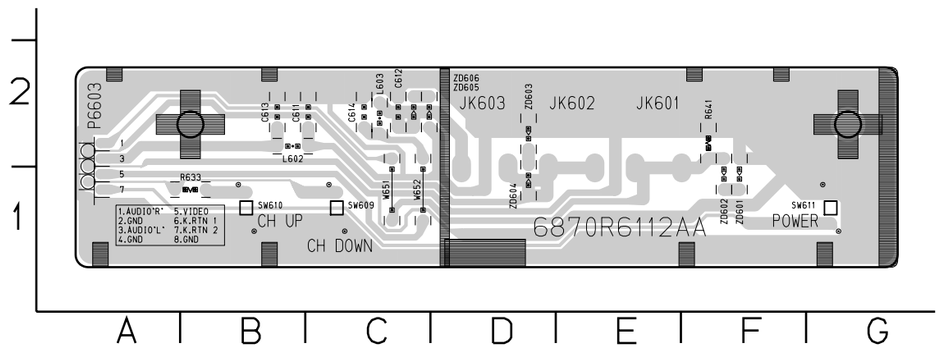
1. MAIN P.C.BOARD



LOCATION GUIDE

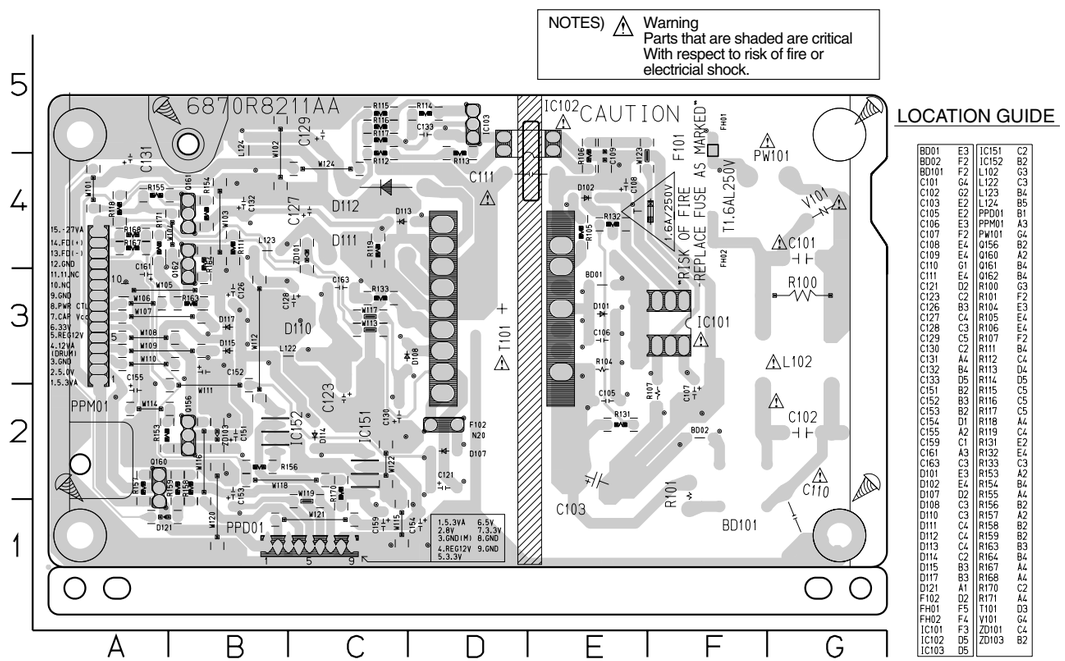
BD01	F11	C612	C3	J801	C10
C301	F5	C613	B2	JK5L1	N3
C302	F4	C614	C2	JK601	B8
C308	F8	C701	D2	JK603	A11
C310	F8	C702	C1	L301	F4
C311	F7	C731	D4	L302	G7
C312	F8	C751	E6	L303	H8
C315	F7	C752	C6	L304	G9
C318	F6	C801	E8	L305	F9
C319	G7	C806	C8	L481	G11
C324	G7	C807	D8	L482	F10
C325	G7	C808	D8	L483	H12
C327	G7	C816	E7	L501	L2
C328	H7	C821	E7	L510	L10
C329	I11	C824	E7	L511	L9
C330	H7	C825	E7	L512	L2
C331	E4	C826	E7	L5F1	M2
C332	H7	C828	E7	L5F2	M2
C333	H7	C829	E7	L5G1	N9
C334	G8	C830	E8	L601	B7
C335	H7	C831	E8	L706	C1
C339	G8	C833	E9	L822	E10
C340	H8	C839	E10	L823	C10
C342	H8	C840	E10	L824	E7
C344	H9	C842	D11	LD501	I7
C346	G9	C843	D9	LED501	N11
C350	F9	C846	D10	M5501	K3
C352	H8	C847	D10	P3D01	E8
C355	E4	C851	D8	P3D02	F6
C360	B5	C866	D8	P3D03	G12
C403	F11	C871	B3	PM601	N6
C405	F12	C873	D10	PM602	N9
C408	G10	C876	C10	PM603	N4
C411	G12	C877	C10	PMC01	G3
C412	G10	C879	C10	PMD01	J12
C416	E11	C880	C9	PMD02	F12
C419	H11	C881	C9	PMF01	L12
C420	H11	C882	D9	PMP01	C5
C428	C6	C883	C9	Q304	F5
C429	C8	C886	C9	Q305	F4
C430	C11	C887	C10	Q308	F4
C432	D12	C888	C8	Q503	M7
C500	M8	C889	D8	Q701	E6
C503	K10	C5501	M11	Q702	D6
C516	M7	D301	H5	RC501	N8
C526	F2	D801	G9	RS501	K5
C531	L10	D802	D11	RS502	K9
C546	G3	ES501	H1	SW501	M7
C561	L3	ES502	I12	SW502	M6
C578	J5	F601	C12	SW503	M5
C579	J6	F602	C12	SW504	M5
C584	K5	F603	C11	SW505	M4
C586	M8	F8A1	C8	SW601	A11
C592	L2	FL301	F4	TU701	A1
C5G1	M10	IC302	D4	X301	H9
C601	J11	IC402	D11	X401	G11
C602	C11	IC503	L12	X501	M8
C603	B11	IC504	M8	X502	M9
C604	B11	IC505	M6	ZD501	N2
C606	J12	J401	F11	ZD502	M2
C609	J11	J502	K2	ZD751	E6
C610	K11	J503	K2	ZD752	D6
C611	C3	J5L1	H2		

2. KEY 1(LEFT) P.C.BOARD



3. KEY 2(RIGHT) P.C.BOARD

4. POWER P.C.BOARD



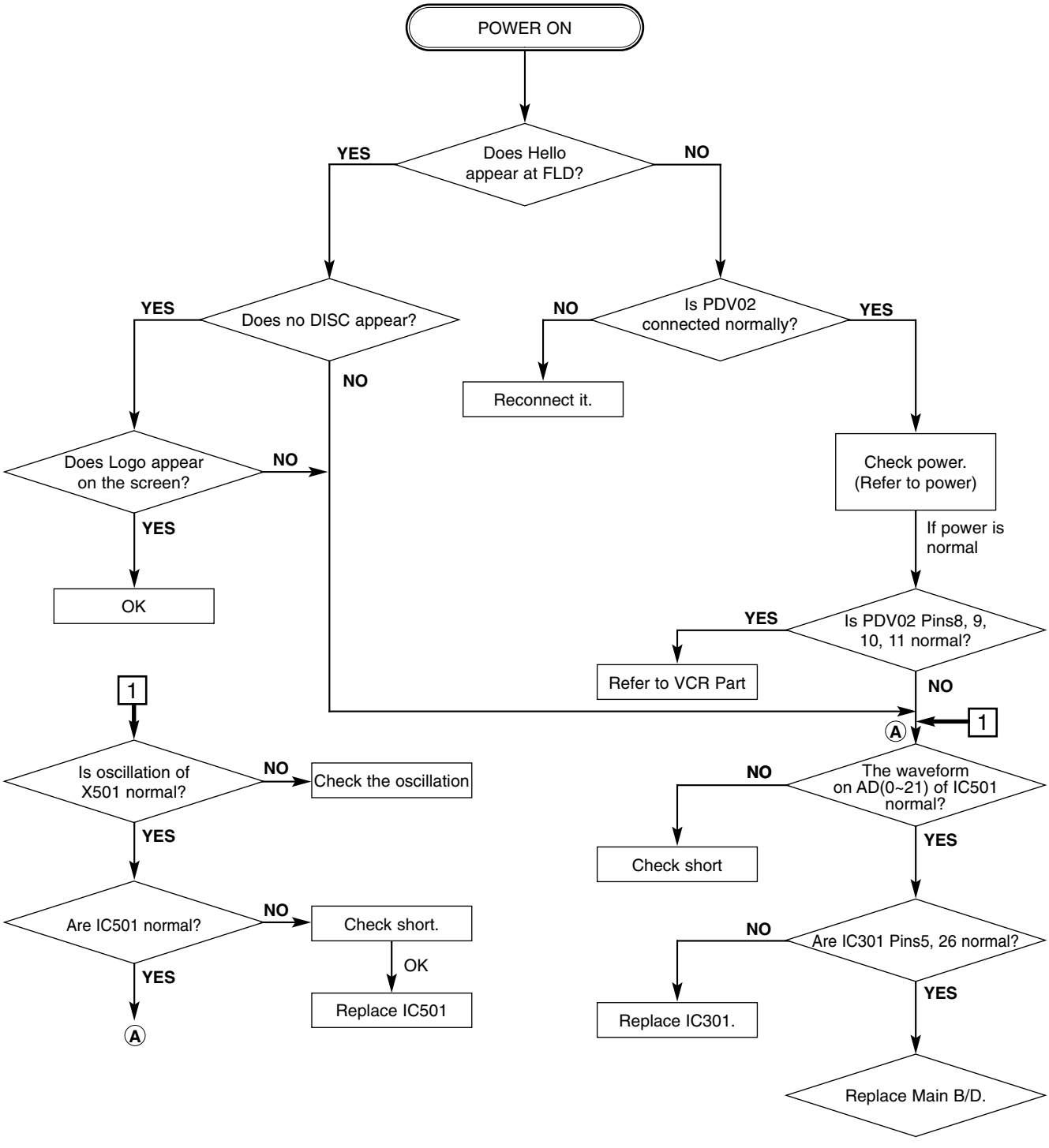
LOCATION GUIDE

BD01	E3	IC151	C2
BD02	F2	IC152	B2
BD101	F2	L102	G3
C101	G4	L122	C3
C102	G2	L123	B4
C103	E2	L124	B5
C105	E2	PPD01	B1
C106	E3	PPM01	A3
C107	F2	PW101	G4
C108	E4	Q156	B2
C109	E4	Q160	A2
C110	G1	Q161	B4
C111	E4	Q162	B4
C121	D2	R100	G3
C123	C2	R101	F2
C126	B3	R104	E3
C127	C4	R105	E4
C128	C3	R106	E4
C129	C5	R107	F2
C130	C2	R111	B4
C131	A4	R112	C4
C132	B4	R113	D4
C133	D5	R114	D5
C151	B2	R115	C5
C152	B3	R116	C5
C153	B2	R117	C5
C154	D1	R118	A4
C155	A2	R119	C4
C159	C1	R131	E2
C161	A3	R132	E4
C163	C3	R133	C3
D101	E3	R153	A2
D102	E4	R154	B4
D107	D2	R155	A4
D108	C3	R156	B2
D110	C3	R157	A2
D111	C4	R158	B2
D112	C4	R159	B2
D113	C4	R163	B3
D114	C2	R164	B4
D115	B3	R167	A4
D117	B3	R168	A4
D121	A1	R170	C2
F102	D2	R171	A4
FH01	F5	T101	D3
FH02	F4	V101	G4
IC101	F3	ZD101	C4
IC102	D5	ZD103	B2
IC103	D5		

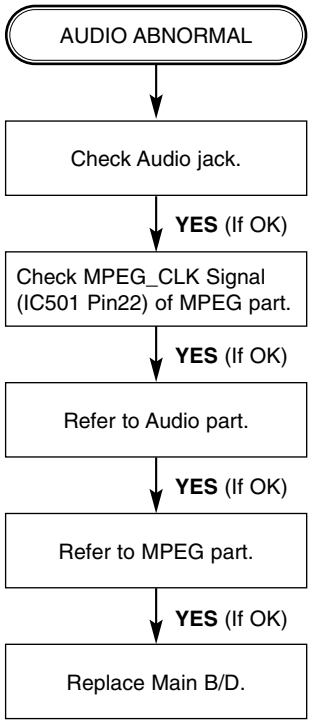
DVD PART
ELECTRICAL TROUBLESHOOTING GUIDE

1. µ-COM Circuit

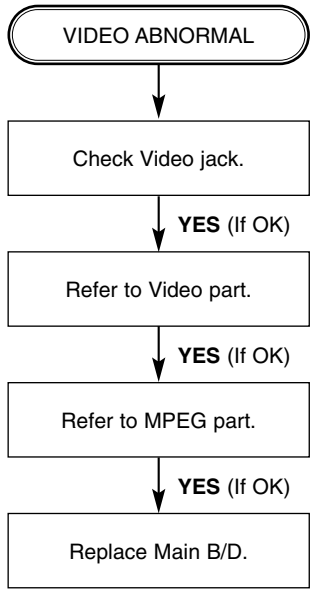
A. No Power



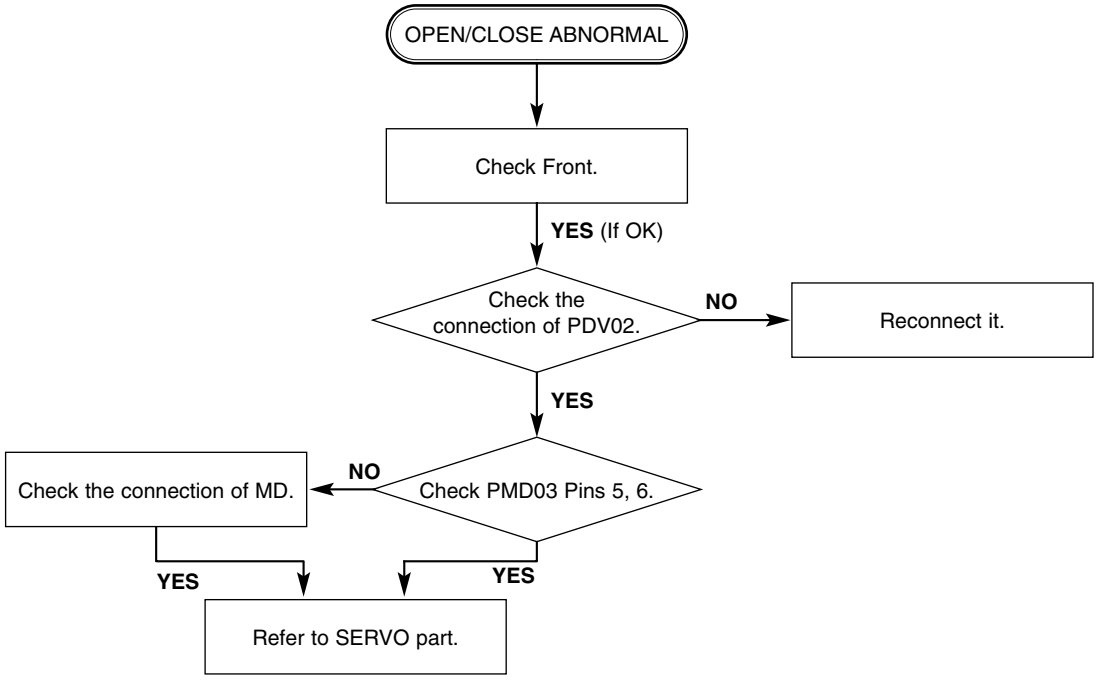
B. Audio abnormal



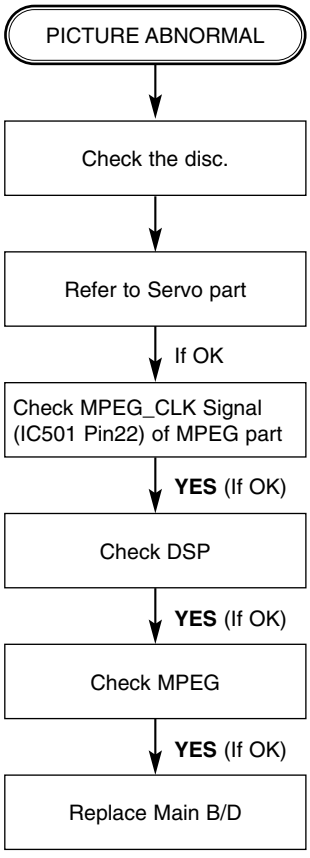
C. Video abnormal



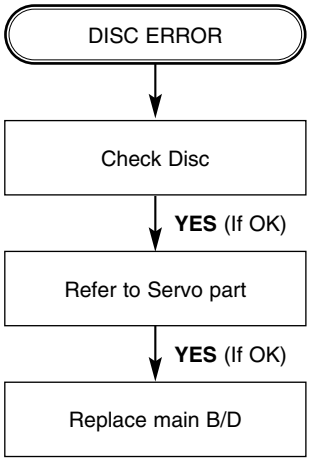
D. Open/Close abnormal



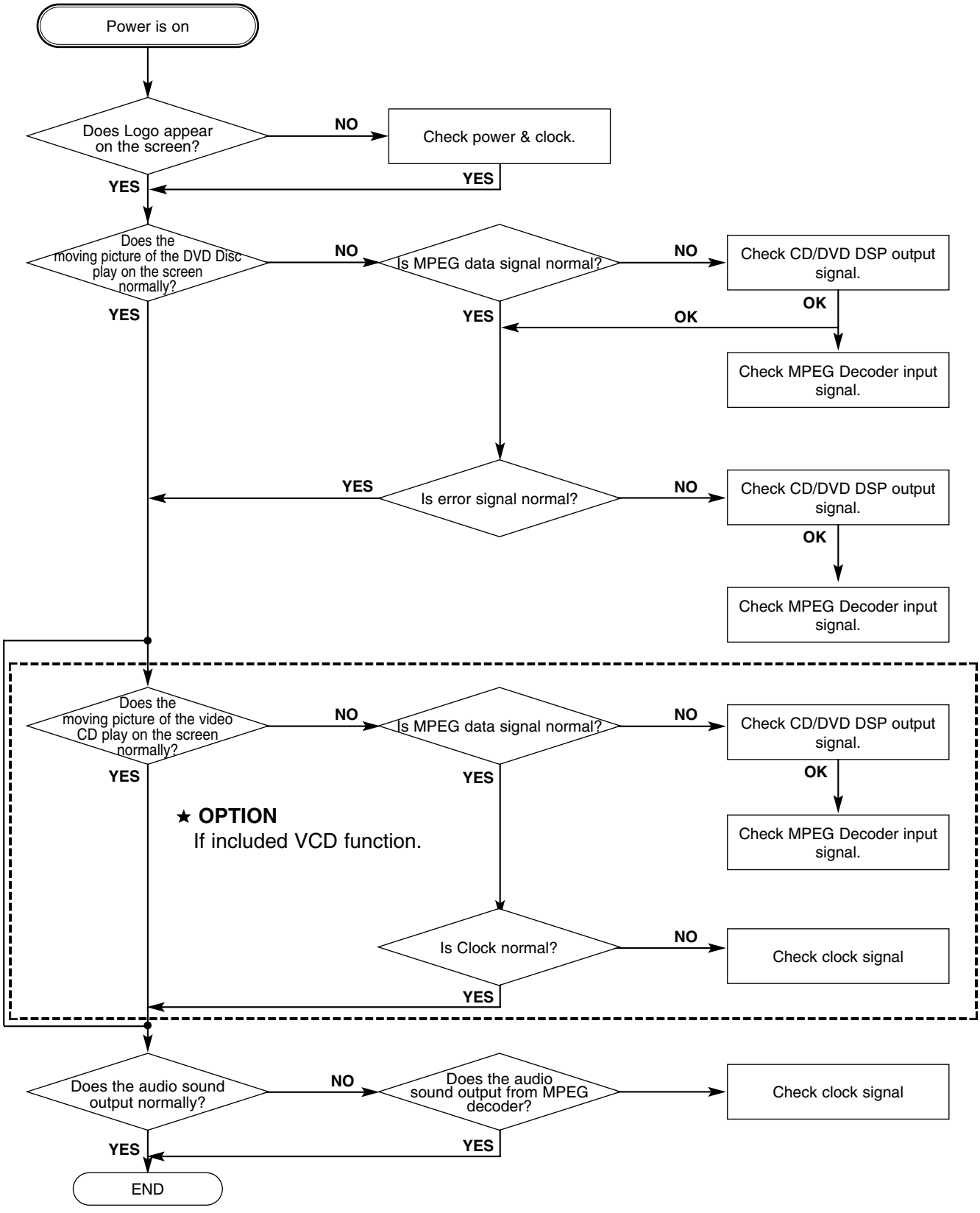
E. Picture abnormal



F. Disc Error

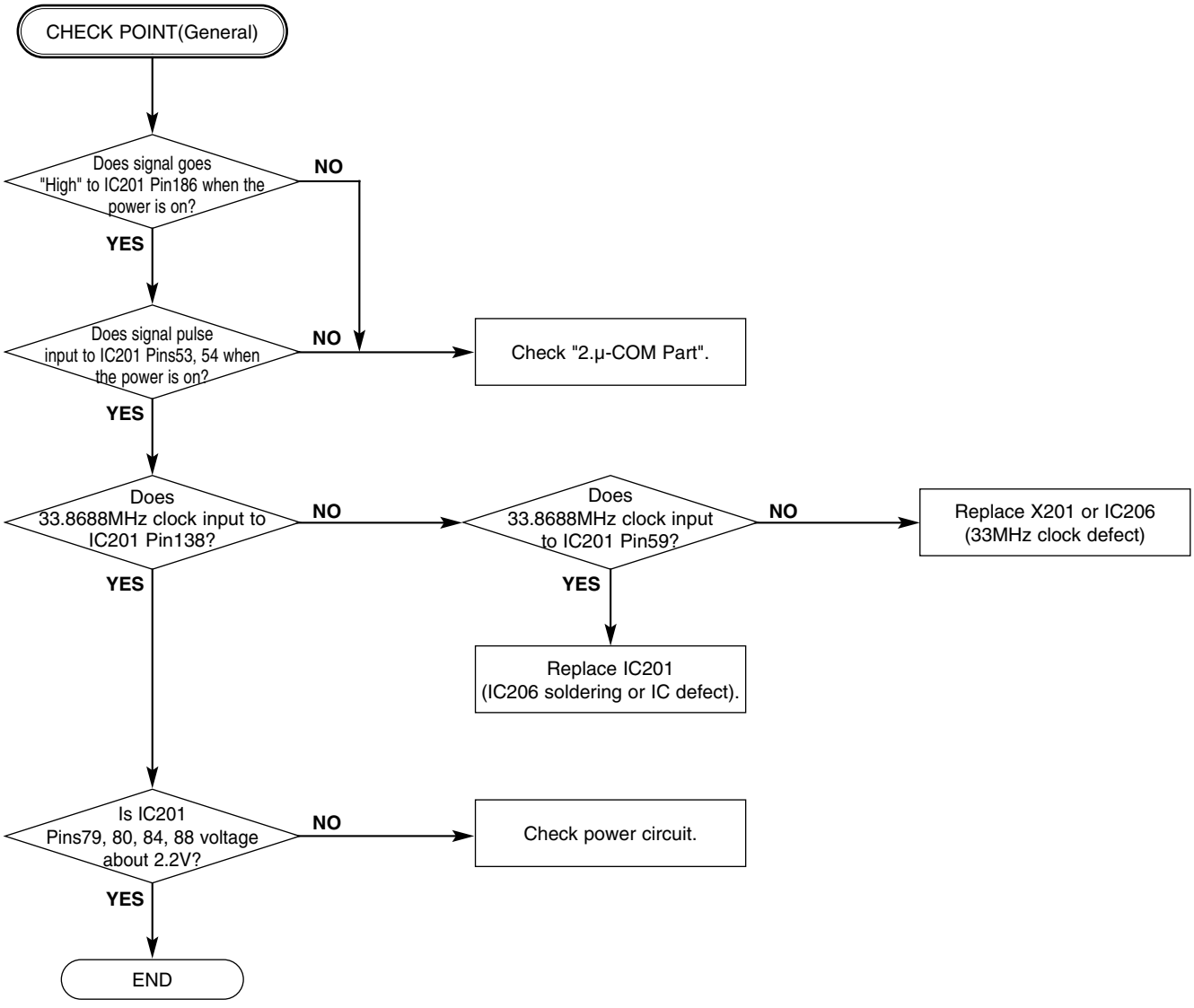


2. MPEG Circuit



3. RF/Servo Circuit

A.



B.

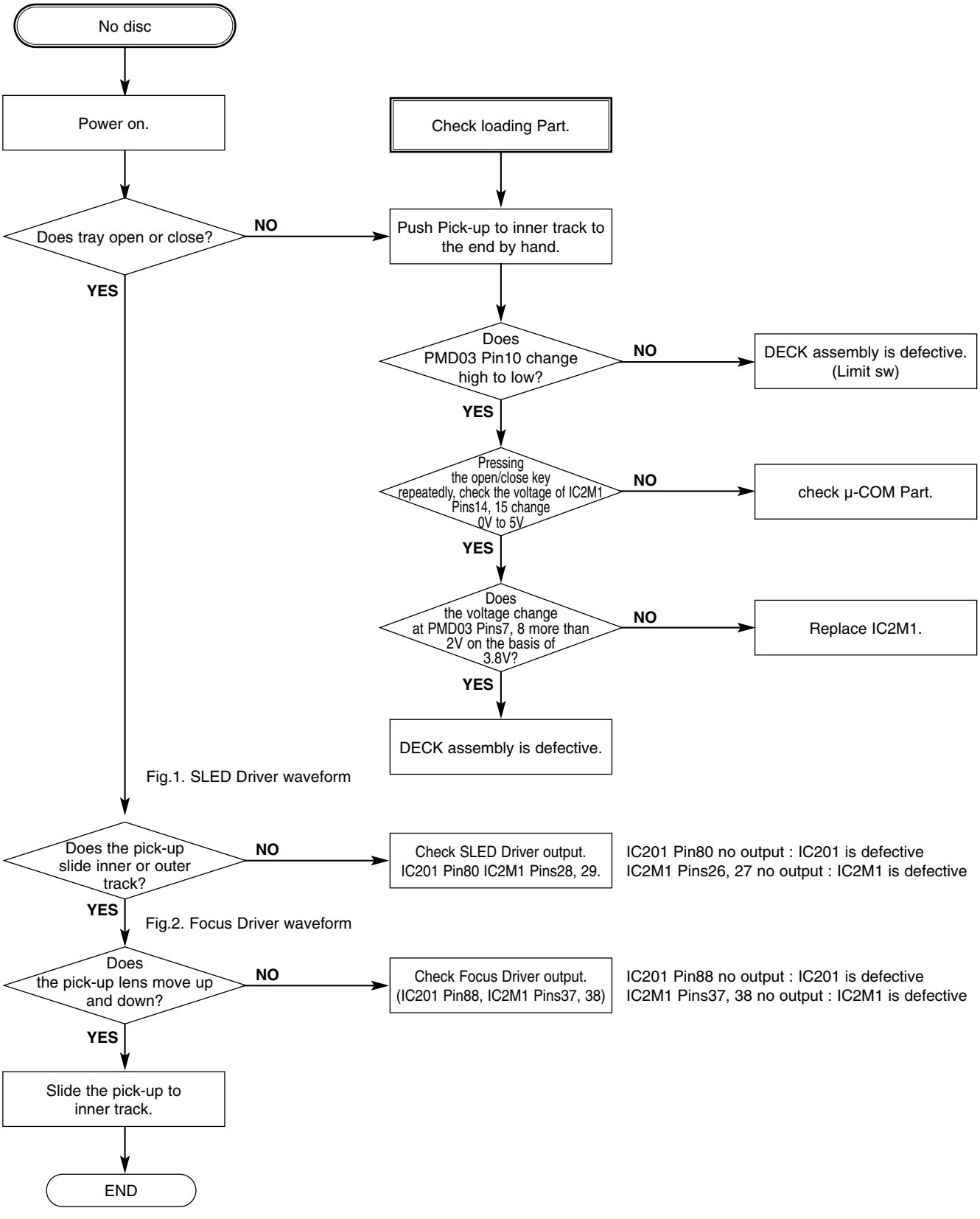

No disc
Power on.
Does tray open or close?
NO
YES
Check loading Part.
Push Pick-up to inner track to the end by hand.
Does PMD03 Pin10 change high to low?
NO
DECK assembly is defective. (Limit sw)
YES
Pressing the open/close key repeatedly, check the voltage of IC2M1 Pins14, 15 change 0V to 5V
NO
check µ-COM Part.
YES
Does the voltage change at PMD03 Pins7, 8 more than 2V on the basis of 3.8V?
NO
Replace IC2M1.
YES
DECK assembly is defective.
Does the pick-up slide inner or outer track?
NO
Check SLED Driver output. IC201 Pin80 IC2M1 Pins28, 29.
IC201 Pin80 no output : IC201 is defective
IC2M1 Pins26, 27 no output : IC2M1 is defective
YES
Does the pick-up lens move up and down?
NO
Check Focus Driver output. (IC201 Pin88, IC2M1 Pins37, 38)
IC201 Pin88 no output : IC201 is defective
IC2M1 Pins37, 38 no output : IC2M1 is defective
YES
Slide the pick-up to inner track.
END

Fig.1. SLED Driver waveform

Fig.2. Focus Driver waveform

C.

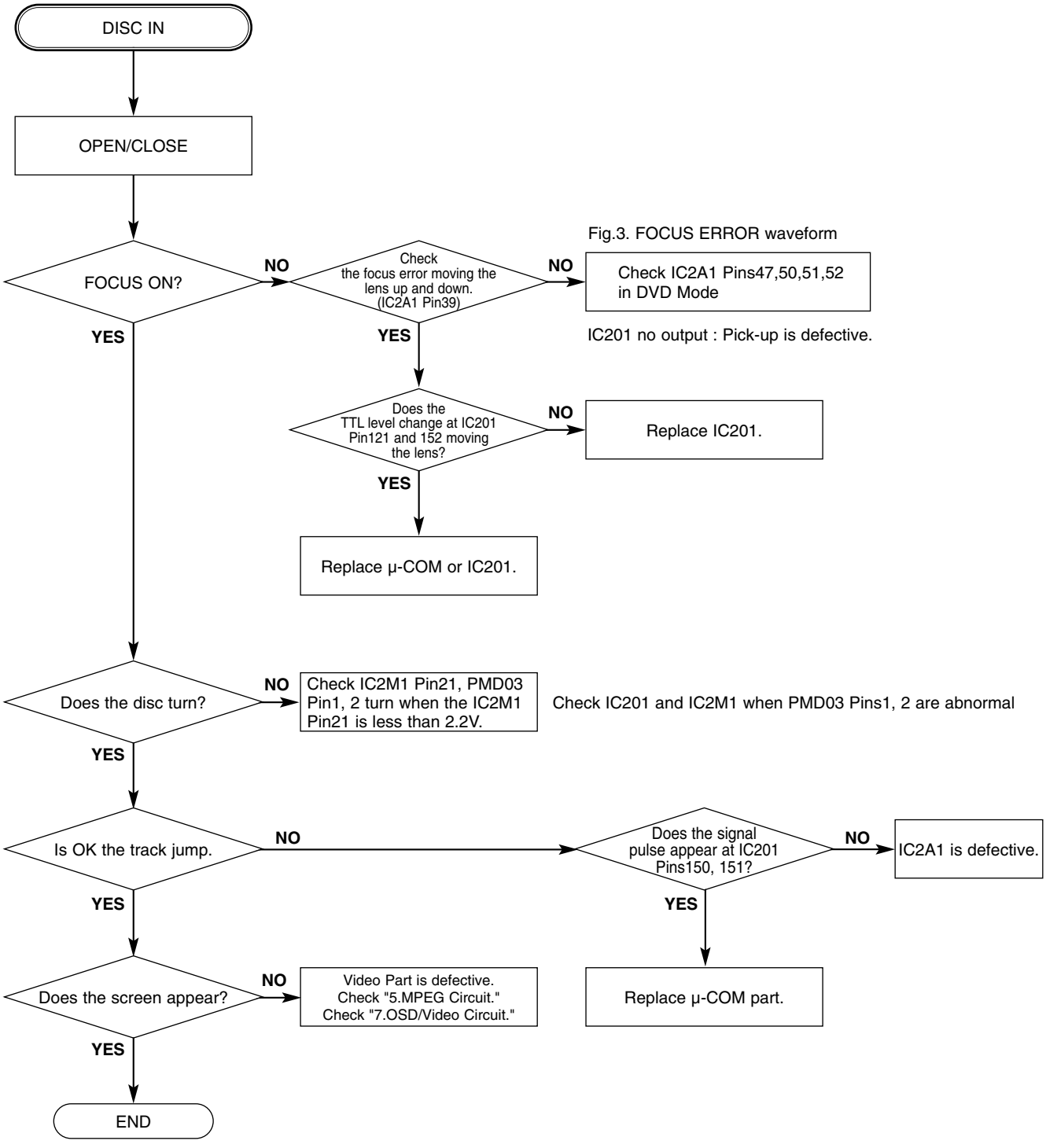
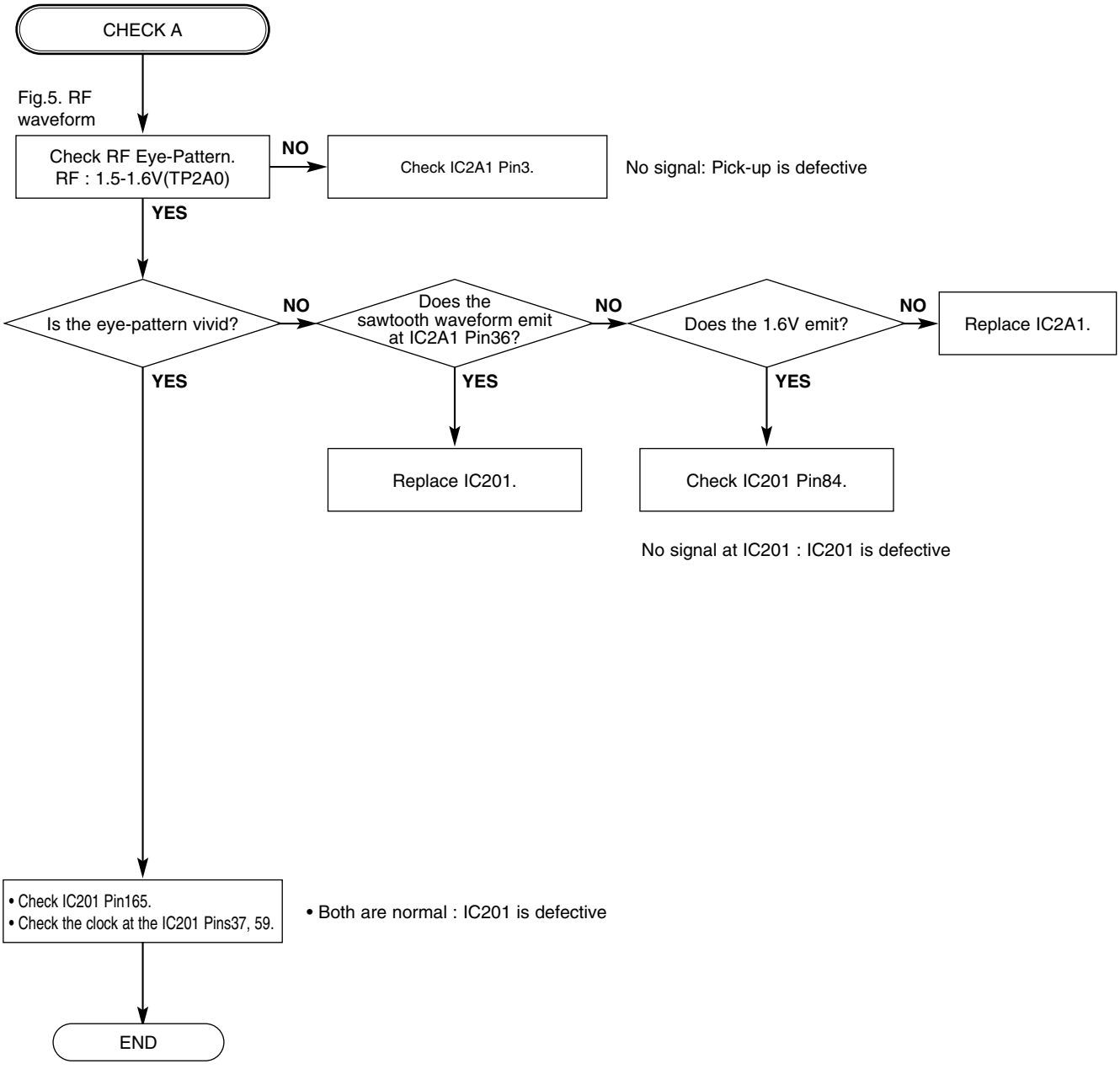


Fig.3. FOCUS ERROR waveform

IC201 no output : Pick-up is defective.

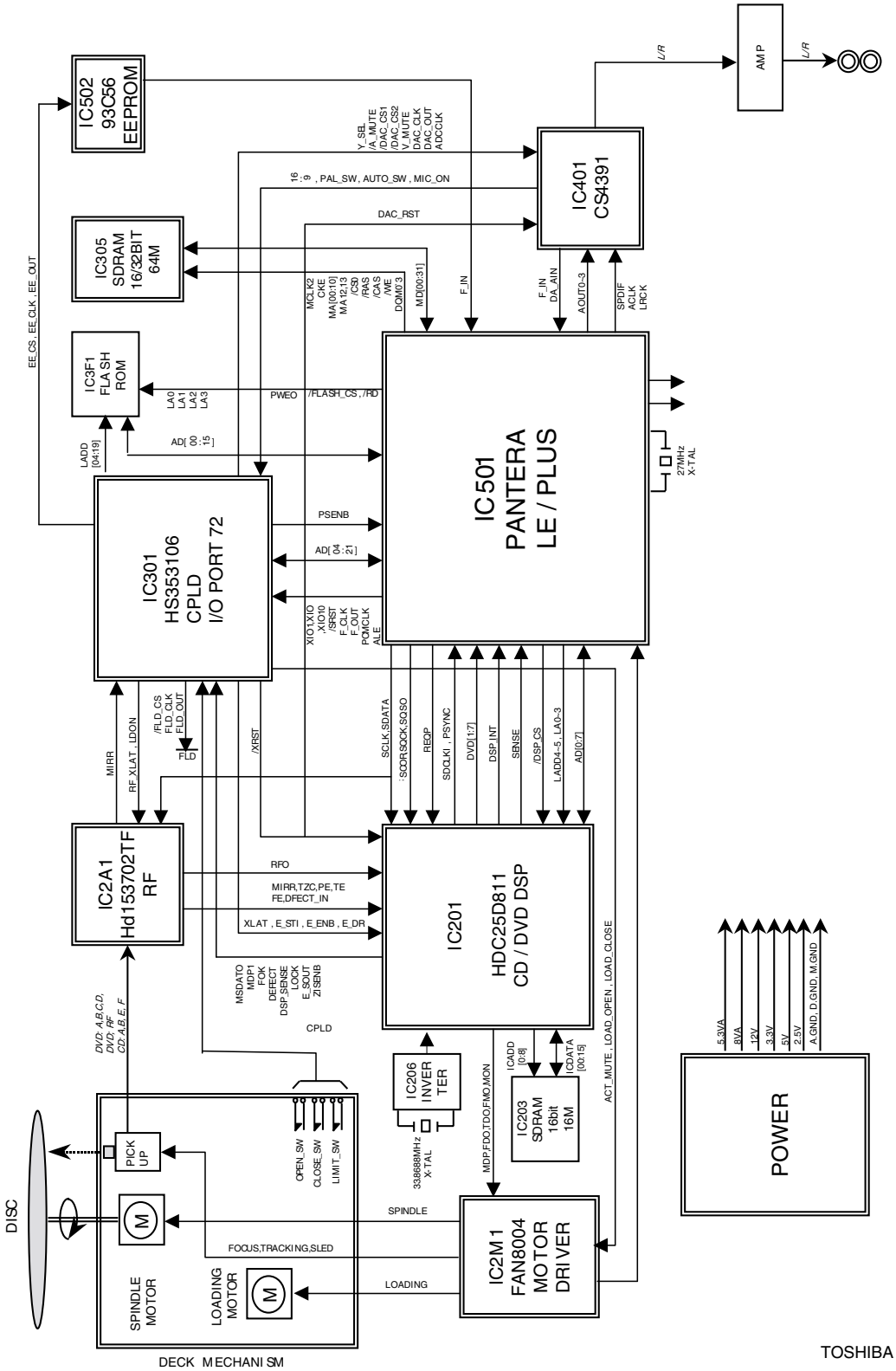
Check IC201 and IC2M1 when PMD03 Pins1, 2 are abnormal

D.


CHECK A
Fig.5. RF waveform
Check RF Eye-Pattern.
RF : 1.5-1.6V(TP2A0)
NO
Check IC2A1 Pin3.
No signal: Pick-up is defective
YES
Is the eye-pattern vivid?
NO
Does the sawtooth waveform emit at IC2A1 Pin36?
NO
Does the 1.6V emit?
NO
Replace IC2A1.
YES
YES
YES
Replace IC201.
Check IC201 Pin84.
No signal at IC201 : IC201 is defective
• Check IC201 Pin165.
• Check the clock at the IC201 Pins37, 59.
• Both are normal : IC201 is defective
END

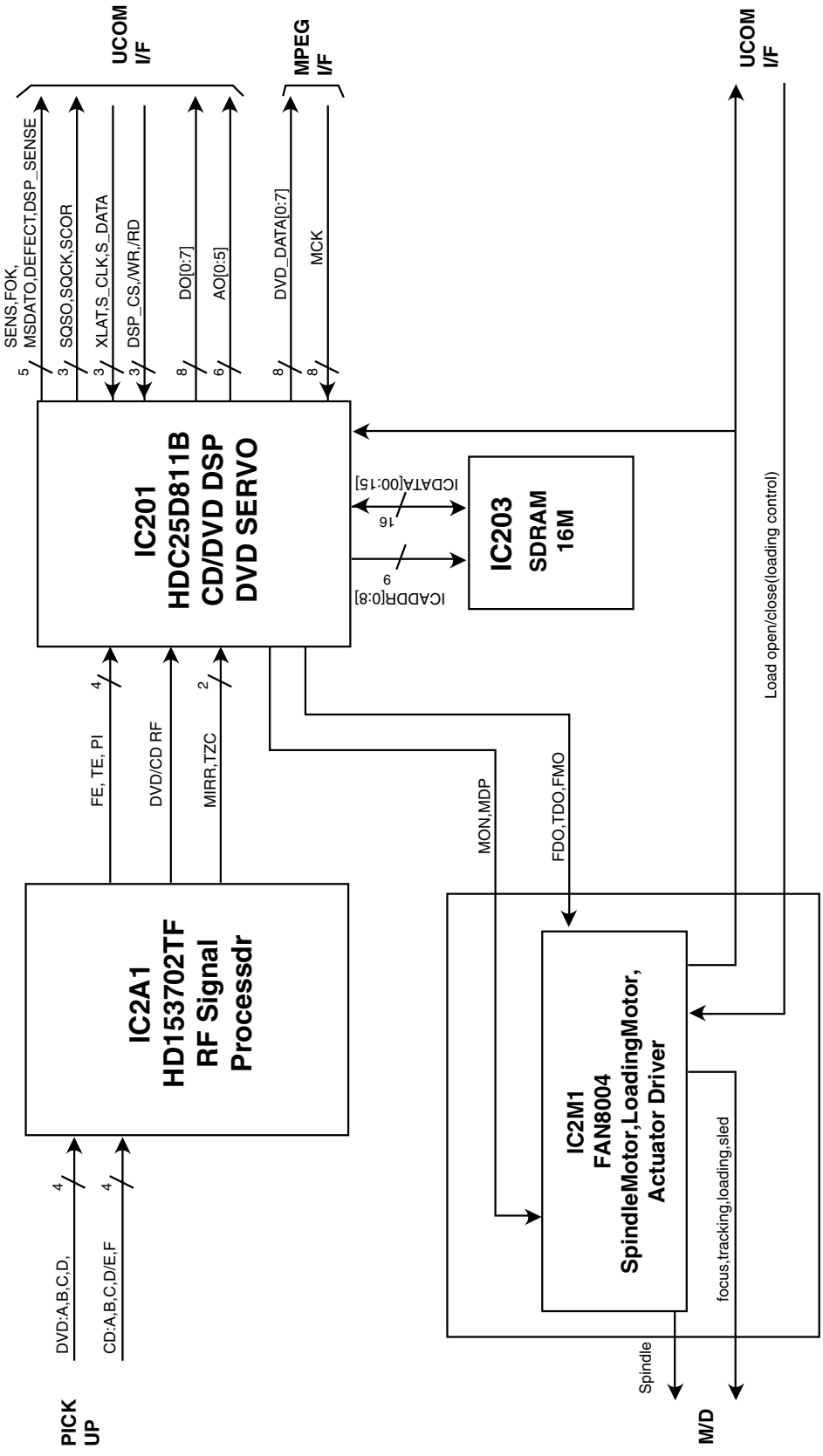
BLOCK DIAGRAMS

1. DVD OVERALL BLOCK DIAGRAM



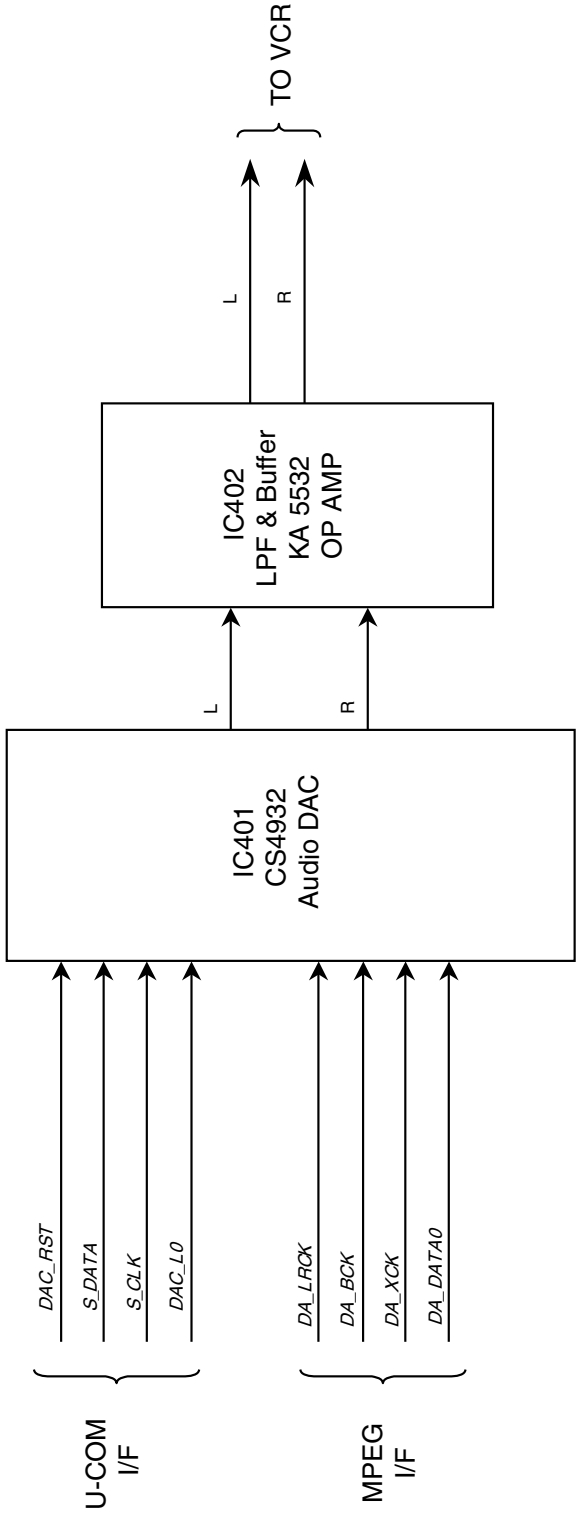
TOSHIBA

2. RF/CD DSP/DVD DSP/DVD SERVO BLOCK DIAGRAM



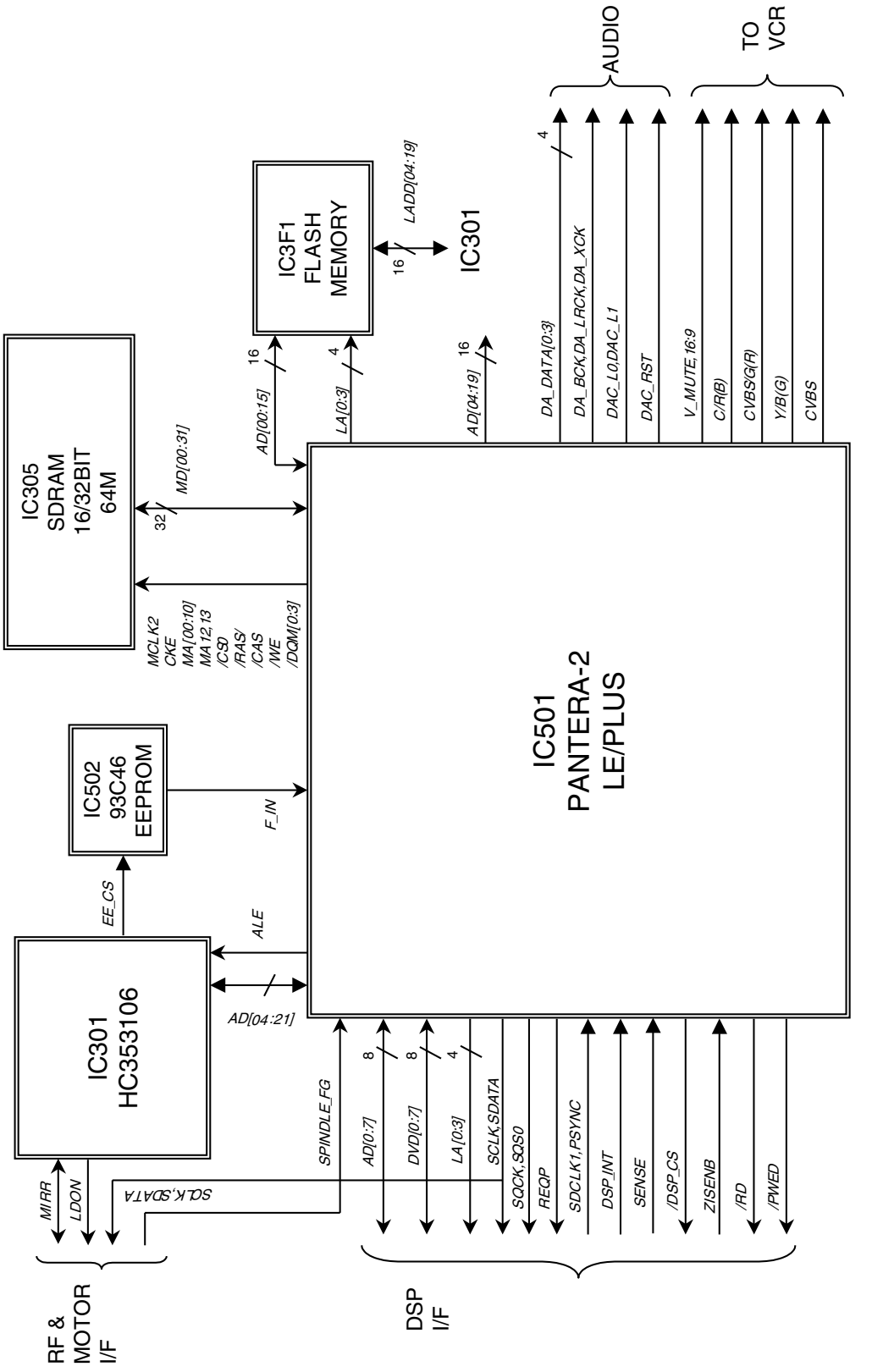
TOSHIBA

3. AUDIO BLOCK DIAGRAM



TOSHIBA

4. MEMORY BLOCK DIAGRAM



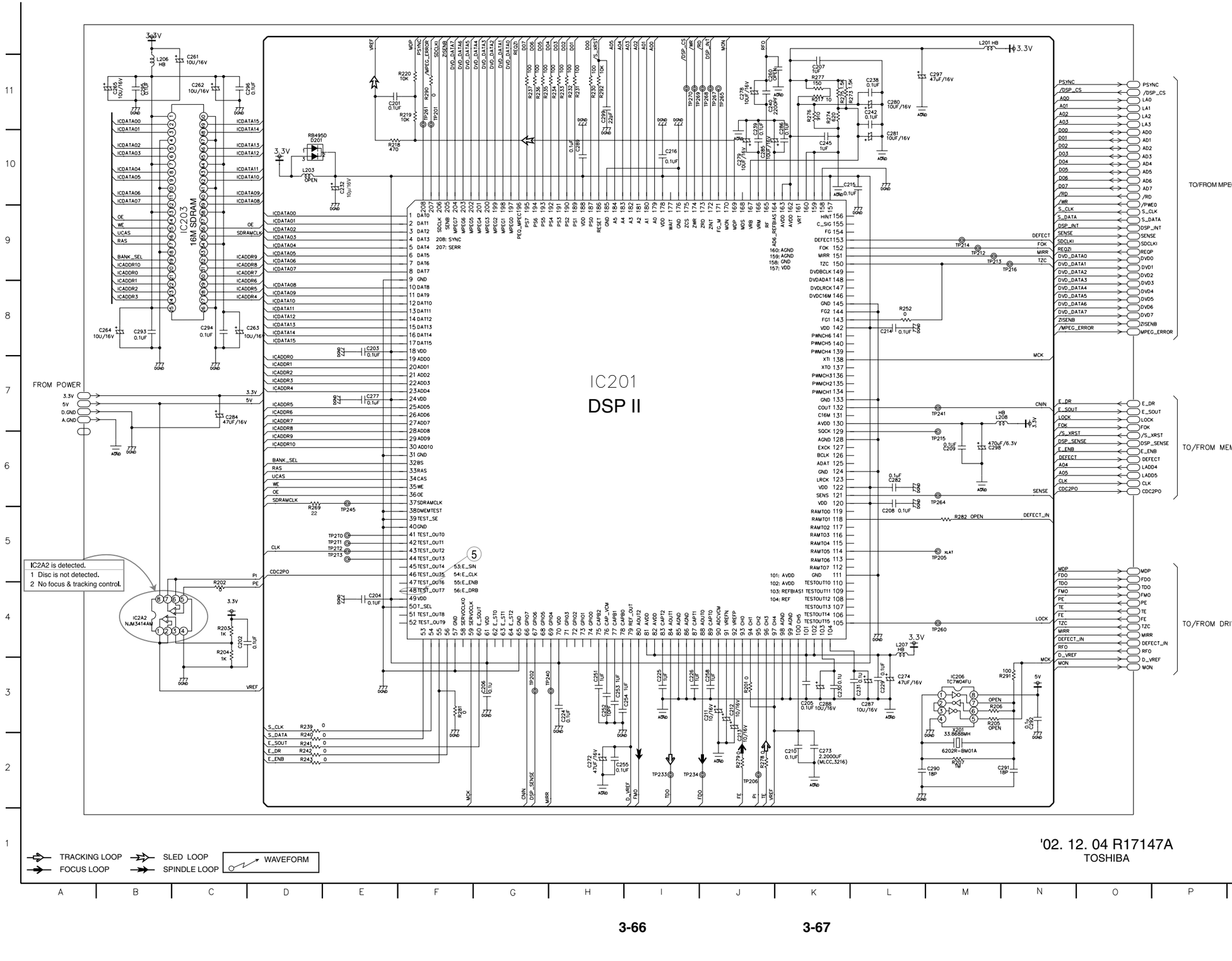
TOSHIBA

MEMO

MEMO

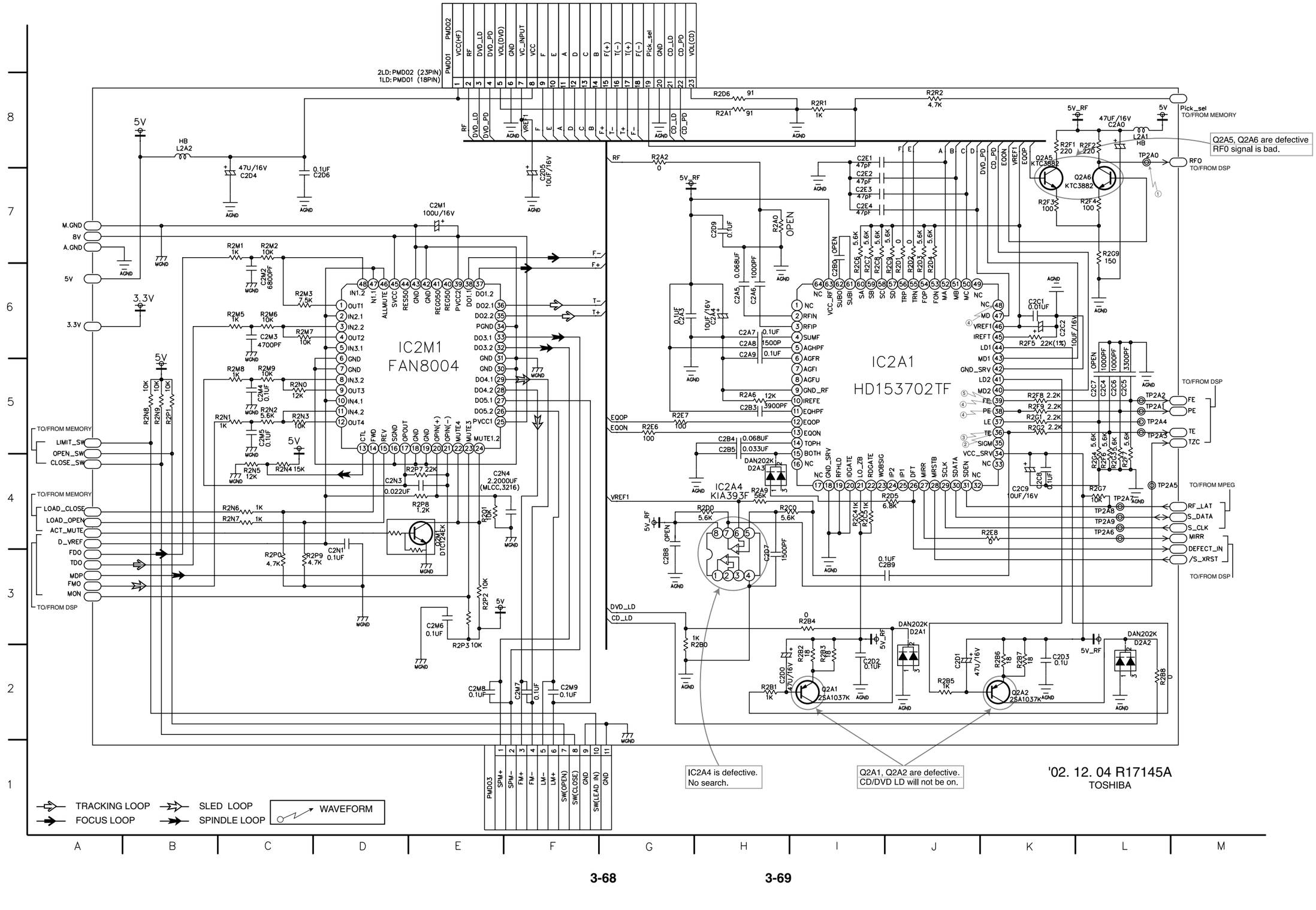
CIRCUIT DIAGRAMS

1. DVD DSP CIRCUIT DIAGRAM

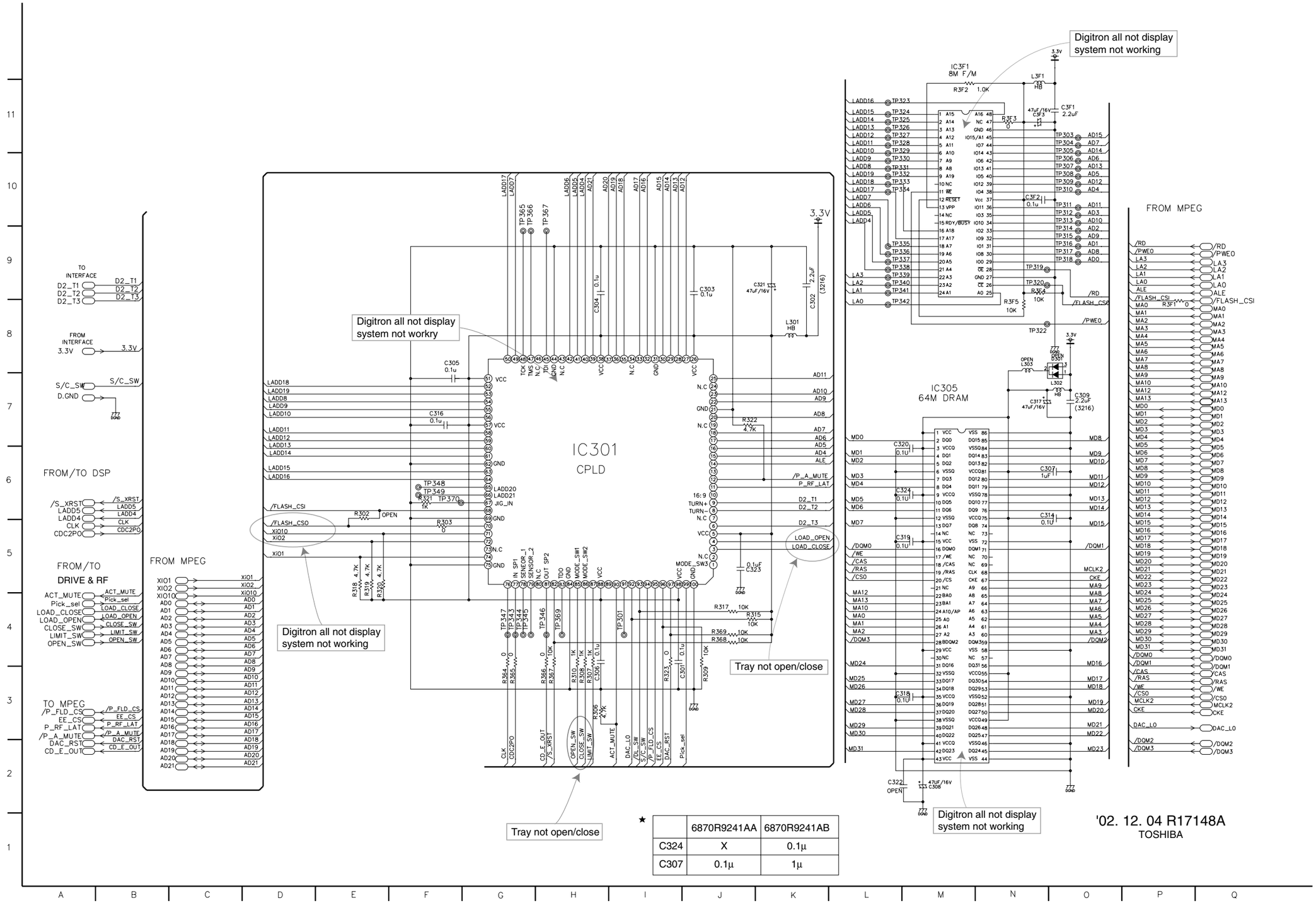


'02. 12. 04 R17147A
TOSHIBA

2. DRIVE & RF CIRCUIT DIAGRAM



3. MEMORY CIRCUIT DIAGRAM

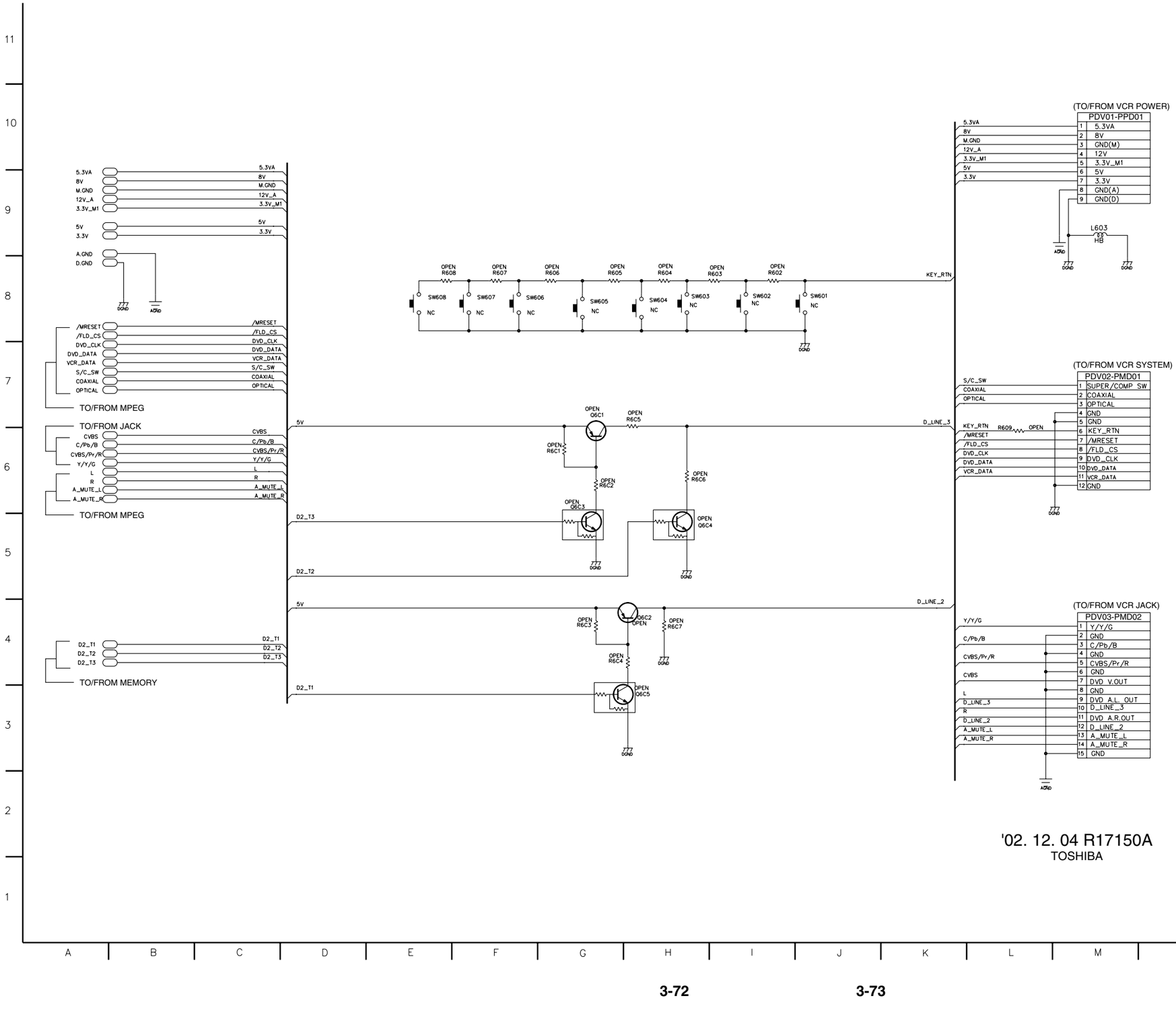


★

	6870R9241AA	6870R9241AB
C324	X	0.1μ
C307	0.1μ	1μ

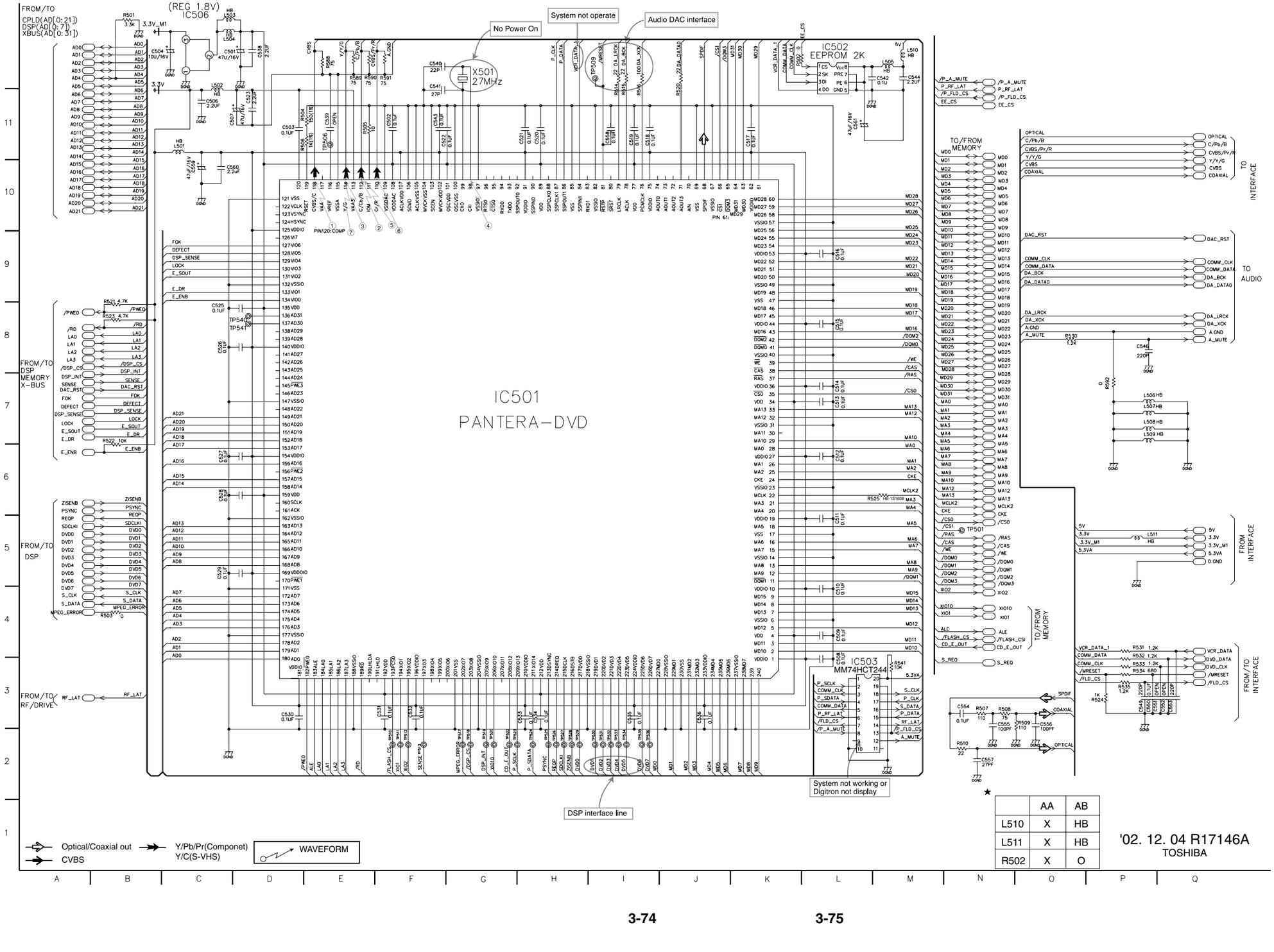
'02. 12. 04 R17148A
TOSHIBA

4. INTERFACE CIRCUIT DIAGRAM



'02. 12. 04 R17150A
TOSHIBA

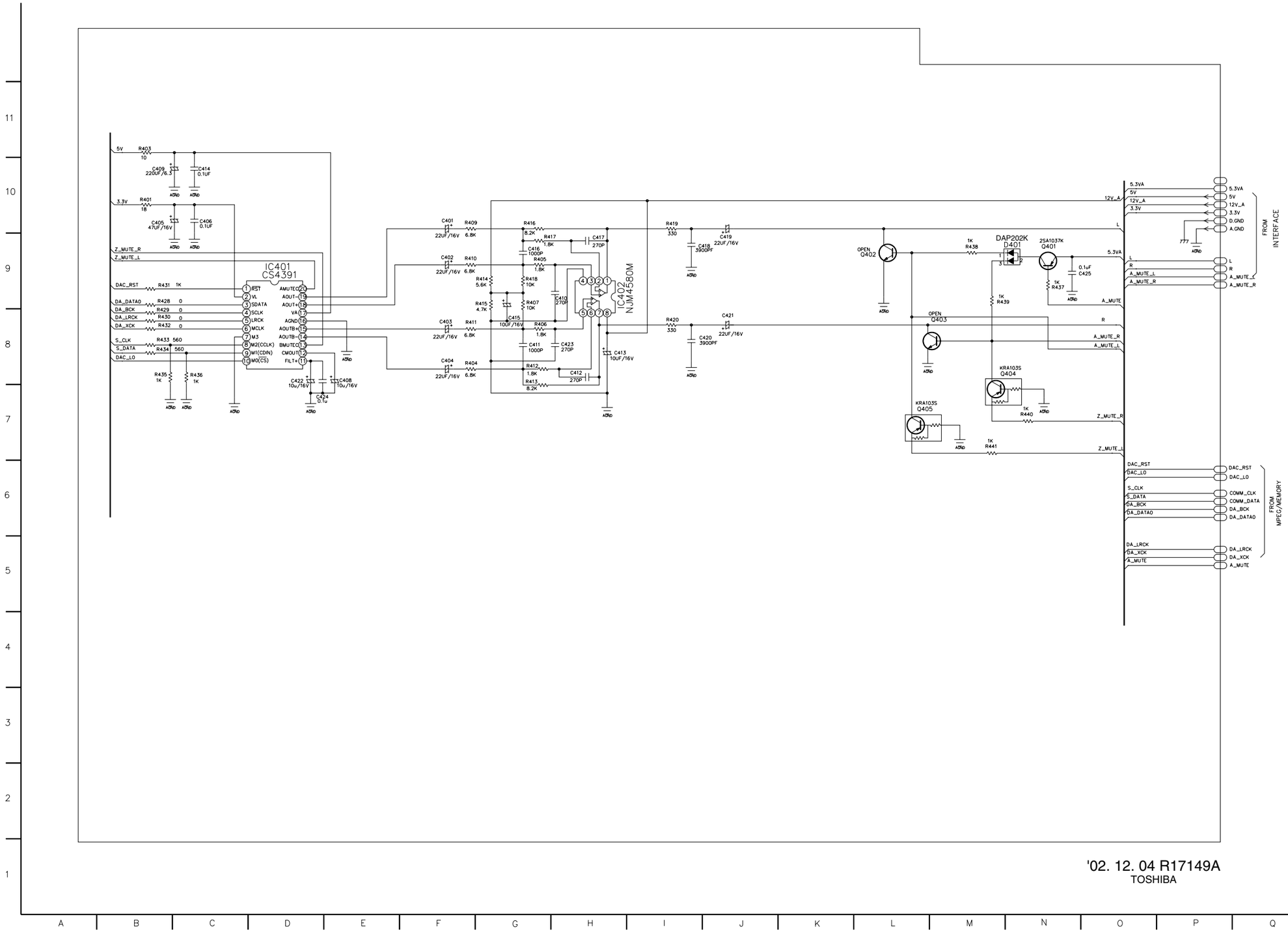
5. µ-COM/EXPANDER CIRCUIT DIAGRAM



	AA	AB
L510	X	HB
L511	X	HB
R502	X	O

'02. 12. 04 R17146A
TOSHIBA

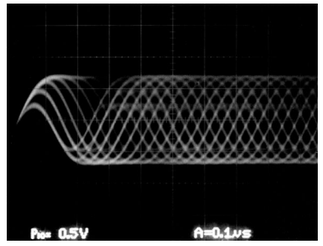
6. JACK CIRCUIT DIAGRAM



'02. 12. 04 R17149A
TOSHIBA

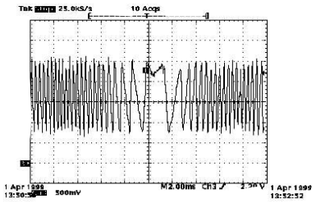
• WAVEFORMS

①



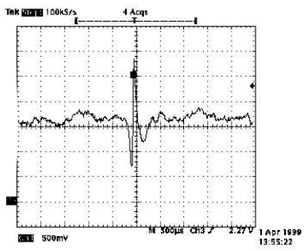
IC2A1
TP2A0

②



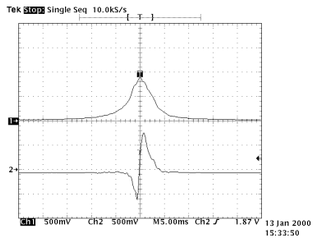
IC2A1 Pin 36
Tracking Error

③



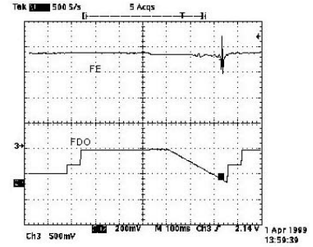
IC2A1 Pin 36
VBR TRACKING Error

④



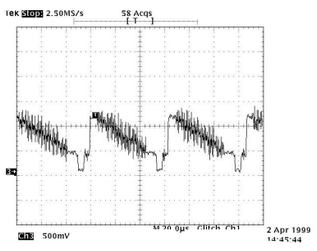
IC2A1 Pin 39, Focus Error
IC2A1 Pin 38, PE

⑤



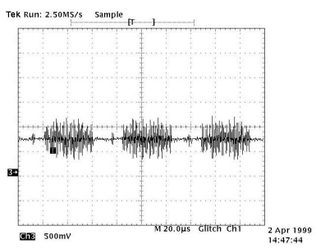
IC2A1 Pin 39, Focus Error(in Focus Search)
IC201 Pin 48, Focus Drive(FDO)

①



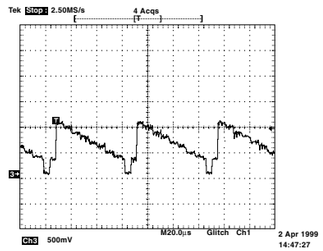
IC501 Pin 118, Composite

②



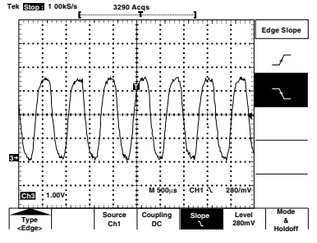
IC501 Pin 112, Chrominance
(Super video out Mode)

③



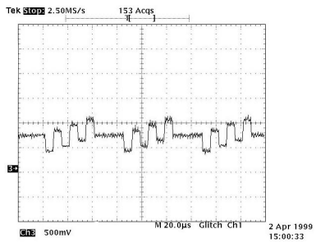
IC501 Pin 114, Luminance
(Super video out Mode)

④



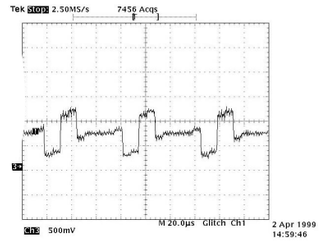
IC501 Pin 98,
MPEG Clock(27MHz)

⑤



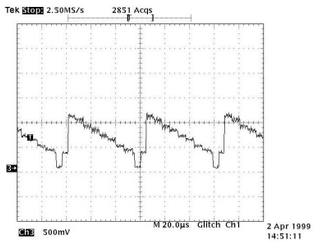
IC501 Pin 112
Component Pb

⑥



IC501 Pin 110
Component Pr

⑦



IC501 Pin 114
Component Y

• CIRCUIT VOLTAGE CHART

MODE / PIN NO.	STOP	PLAY
DSP		
IC201		
1	3.21	3.07
2	3.21	3.05
3	3.21	3.07
4	3.21	3.02
5	3.21	3.05
6	3.21	3.04
7	3.21	3.05
8	3.21	3.05
9	0.00	3.05
10	3.21	0.00
11	3.21	3.04
12	3.21	0.00
13	3.21	0.00
14	3.21	0.00
15	3.21	3.03
16	3.21	3.05
17	3.21	3.04
18	3.21	0.00
19	3.21	0.00
20	3.21	0.00
21	3.21	0.00
22	0.01	0.00
23	0.01	0.03
24	3.21	0.00
25	3.21	0.00
26	0.02	0.00
27	0.02	0.00
28	0.02	0.00
29	0.02	0.00
30	0.02	0.00
31	0.02	0.00
32	0.02	0.00
33	3.21	0.00
34	3.21	0.00
35	3.21	3.19
36	0.02	0.00
37	1.80	0.00
38	0.02	0.00
39	0.02	0.00
40	0.02	0.00
41	1.78	0.00
42	0.02	1.61
43	0.13	0.20
44	1.78	1.61
45	0.02	2.70
46	0.02	2.70
47	0.02	2.70
48	1.78	1.81
49	3.21	3.20
50	0.01	0.00
51	0.01	1.57
52	0.01	1.53
53	0.02	0.00

MODE / PIN NO.	EE	PLAY
54	5.72	5.18
55	0.02	0.00
56	3.21	3.21
57	0.02	0.00
58	1.80	1.59
59	2.38	0.00
60	0.02	0.00
61	3.21	3.01
62	3.21	0.00
63	3.21	3.21
64	0.02	0.00
65	0.02	0.00
66	0.87	1.19
67	0.01	1.90
68	3.21	3.21
69	1.07	1.55
70	3.21	0.00
71	0.02	0.00
72	3.21	0.00
73	0.02	0.00
74	0.02	0.00
75	0.87	0.00
76	1.59	0.00
77	0.87	0.00
78	0.87	0.78
79	2.36	2.15
80	2.86	0.00
81	3.24	0.00
82	3.24	0.00
83	2.19	1.97
84	2.39	0.00
85	0.00	0.00
86	0.00	0.00
87	2.19	0.00
88	2.38	0.00
89	2.18	0.00
90	1.80	1.62
91	0.92	0.00
92	2.69	0.00
93	1.77	0.00
94	1.81	0.00
95	1.53	0.00
96	1.83	0.00
97	1.81	0.00
98	0.00	0.00
99	0.00	0.00
100	1.81	1.63
101	3.21	3.24
102	3.21	3.25
103	2.28	0.00
104	2.28	0.00
105	0.90	1.48
106	1.30	1.67
107	1.59	1.59
108	2.00	1.65

MODE / PIN NO.	EE	PLAY
109	2.00	1.64
110	2.40	1.60
111	0.02	0.00
112	0.02	0.00
113	0.02	0.00
114	0.02	0.00
115	0.02	0.00
116	0.02	0.00
117	0.02	0.00
118	0.02	0.00
119	0.02	0.00
120	3.21	3.22
121	0.70	3.22
122	3.21	3.22
123	3.21	1.61
124	0.02	0.00
125	3.21	1.64
126	3.21	1.61
127	3.00	0.00
128	0.02	0.00
129	3.21	2.35
130	3.21	3.25
131	3.21	1.59
132	0.84	0.02
133	0.02	0.00
134	3.21	3.22
135	3.21	2.35
136	2.67	2.39
137	1.85	1.62
138	2.40	2.12
139	2.68	2.41
140	2.64	0.30
141	2.64	3.20
142	3.21	3.22
143	1.12	2.32
144	0.02	0.00
145	0.02	0.00
146	2.66	0.30
147	2.67	0.30
148	2.68	0.30
149	2.68	0.30
150	1.09	2.33
151	1.09	0.00
152	0.02	3.22
153	0.02	0.00
154	0.67	1.53
155	0.90	0.00
156	3.21	3.22
157	3.21	3.22
158	0.02	0.00
159	0.00	0.00
160	0.00	0.00
161	3.02	2.70
162	3.21	3.24
163	3.21	3.24

MODE / PIN NO.	EE	PLAY
164	2.31	2.07
165	2.38	0.00
166	2.39	2.14
167	1.80	1.61
168	3.08	0.00
169	0.02	2.06
170	0.04	0.00
171	3.03	2.54
172	3.21	0.00
173	3.21	0.00
174	3.21	0.00
175	3.21	3.21
176	0.02	0.00
177	3.21	0.00
178	3.21	3.21
179	3.21	3.13
180	0.02	0.00
181	0.02	0.00
182	0.02	0.00
183	0.02	0.00
184	0.02	0.00
185	0.02	0.00
186	3.21	3.25
187	1.50	1.05
188	3.21	0.00
189	1.55	1.58
190	1.57	0.00
191	1.63	1.64
192	0.23	0.19
193	2.32	2.04
194	2.20	2.70
195	1.63	0.00
196	0.02	0.00
197	0.02	0.00
198	0.02	0.00
199	0.02	0.00
200	0.02	0.00
201	0.02	1.00
202	0.02	0.00
203	0.02	0.00
204	0.02	0.00
205	3.21	3.21
206	0.02	1.58
207	0.02	2.96
208	0.02	1.63
IC206		
1	2.26	2.28
2	0.01	0.01
3	0.01	0.01
4	0.00	0.00
5	5.07	5.04
6	1.14	1.03
7	2.15	2.15
8	5.07	5.04

MODE / PIN NO.	EE	PLAY
SERVO		
IC2A1		
1	0.00	0.00
2	3.24	3.02
3	3.24	3.01
4	1.85	1.99
5	3.35	3.17
6	2.63	2.43
7	1.10	0.30
8	1.10	0.30
9	0.00	0.80
10	1.24	1.18
11	2.54	2.27
12	3.38	3.13
13	3.34	3.09
14	2.52	2.70
15	2.64	1.95
16	0.01	0.14
17	0.02	0.00
18	0.01	0.00
19	0.01	0.00
20	0.01	0.00
21	5.41	5.01
22	5.41	5.01
23	0.02	0.00
24	0.01	0.00
25	0.01	0.00
26	0.03	0.00
27	0.01	0.00
28	3.51	3.24
29	5.58	5.16
30	0.02	0.00
31	0.03	0.00
32	0.04	0.00
33	0.03	0.00
34	5.44	5.01
35	2.45	2.27
36	3.40	2.51
37	0.78	2.37
38	0.53	0.00
39	2.40	2.17
40	0.00	0.22
41	5.44	3.66
42	0.00	0.00
43	0.00	0.00
44	5.45	5.01
45	2.47	2.29
46	2.47	2.29
47	2.47	2.42
48	0.02	2.42
49	0.01	2.27
50	2.47	2.43
51	2.47	2.44
52	2.48	2.38
53	2.47	2.29

MODE / PIN NO.	EE	PLAY
54	2.47	0.00
55	2.47	2.51
56	2.47	2.50
57	2.47	2.29
58	2.47	2.28
59	2.47	2.28
60	2.47	2.28
61	0.80	0.96
62	0.80	0.86
63	5.60	5.01
64	0.00	0.00
IC2A2		
1	1.64	0
2	1.64	1.64
3	1.64	1.64
4	0.01	0.01
5	1.63	2.19
6	1.63	2.19
7	1.63	2.19
8	5.1	5.07
IC2A4		
1	0	0
2	0.46	0.93
3	0.53	0.97
4	0	0
5	2.27	2.26
6	2.28	2.27
7	0.29	2.37
8	5.09	5.05
IC2M1		
1	2.30	0.00
2	2.32	0.00
3	2.31	0.00
4	2.28	2.15
5	2.32	2.15
6	0.00	0.00
7	0.00	0.00
8	2.32	2.15
9	2.25	2.83
10	2.32	2.15
11	2.32	2.15
12	2.30	2.20
13	2.45	2.24
14	2.82	0.00
15	2.82	0.00
16	0.01	0.00
17	2.38	1.54
18	0.00	0.00
19	0.00	0.00
20	2.07	1.92
21	2.07	1.91
22	0.01	0.00
23	0.04	0.00
24	0.01	0.00
25	8.70	7.96

MODE / PIN NO.	EE	PLAY
26	4.33	0.00
27	4.32	4.01
28	4.33	4.05
29	4.36	3.97
30	0.10	0.00
31	0.01	0.13
32	4.23	4.92
33	4.50	0.00
34	0.00	0.00
35	1.71	0.00
36	1.78	4.00
37	1.73	4.21
38	1.74	3.75
39	1.92	0.00
40	1.91	7.89
41	0.00	0.00
42	0.00	0.00
43	0.00	0.00
44	0.00	0.00
45	1.94	0.00
46	2.33	2.15
47	2.33	0.00
48	2.06	2.15
IC301		
1	3.17	0.38
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	3.26	3.26
6	3.25	3.26
7	0.00	0.00
8	3.25	3.26
9	0.00	0.00
10	0.00	3.26
11	0.00	0.00
12	3.24	3.25
13	3.26	3.26
14	0.00	0.00
15	0.20	0.00
16	2.16	2.10
17	1.80	2.19
18	1.57	2.08
19	0.00	0.00
20	0.00	0.00
21	0.00	0.00
22	0.00	0.00
23	0.00	0.00
24	0.00	0.00
25	0.00	0.00
26	3.25	3.26
27	0.00	0.00
28	0.00	0.00
29	0.00	0.00
30	0.00	0.00
31	0.00	0.00

MODE / PIN NO.	EE	PLAY
32	0.00	0.00
33	0.00	0.00
34	0.00	0.00
35	0.00	0.00
36	0.00	0.00
37	0.00	0.00
38	3.26	3.26
39	0.00	0.00
40	0.00	0.00
41	0.00	0.00
42	0.00	0.00
43	0.00	0.00
44	0.00	0.00
45	0.00	0.00
46	0.00	0.00
47	0.00	0.00
48	0.00	0.00
49	0.00	0.00
50	0.00	0.00
51	3.26	3.26
52	3.25	1.32
53	2.39	2.82
54	0.00	0.00
55	0.00	0.00
56	0.00	0.00
57	3.26	3.27
58	0.00	0.00
59	0.00	0.00
60	0.00	0.00
61	0.00	0.00
62	0.00	0.00
63	0.00	0.00
64	0.00	0.00
65	0.00	0.00
66	0.00	0.00
67	0.00	0.00
68	3.12	3.26
69	0.00	0.00
70	3.25	3.26
71	3.12	3.23
72	0.00	0.00
73	0.00	0.00
74	3.12	3.23
75	0.00	0.00
76	0.00	0.00
77	0.00	0.00
78	2.62	3.60
79	2.49	2.76
80	0.00	0.00
81	0.00	0.00
82	3.26	3.26
83	0.00	0.00
84	0.00	0.00
85	5.06	5.04
86	0.00	0.00

MODE / PIN NO.	EE	PLAY
87	0.00	0.00
88	3.26	3.26
89	3.18	3.31
90	3.25	3.26
91	0.00	2.26
92	3.26	3.26
93	3.26	3.26
94	0.00	0.00
95	1.69	1.68
96	0.00	0.00
97	3.26	3.26
98	3.26	3.26
99	5.05	5.04
100	0.00	0.00
MPEG		
IC501		
1	3.23	3.21
2	0.63	0.00
3	0.53	0.00
4	1.76	1.76
5	3.23	0.68
6	0.00	0.00
7	0.00	0.00
8	0.48	0.64
9	0.40	0.63
10	3.23	3.21
11	0.00	0.00
12	0.05	0.13
13	0.08	0.14
14	0.00	0.00
15	1.61	1.75
16	0.00	1.57
17	0.00	0.00
18	1.61	1.76
19	3.23	3.21
20	0.99	1.48
21	1.68	1.64
22	2.75	2.83
23	0.00	1.35
24	3.23	3.21
25	1.60	1.75
26	1.54	1.33
27	3.23	3.21
28	1.86	0.38
29	0.04	0.35
30	0.05	0.09
31	0.00	0.80
32	2.43	2.00
33	0.84	0.84
34	1.76	1.76
35	2.90	2.89
36	3.23	7.21
37	3.18	0.50
38	0.32	0.30
39	3.21	3.22

MODE / PIN NO.	EE	PLAY
40	0.00	0.00
41	0.00	0.00
42	0.06	0.00
43	2.94	0.00
44	3.23	3.23
45	1.14	0.05
46	0.69	0.04
47	0.00	0.00
48	0.60	0.28
49	0.00	0.00
50	0.74	0.79
51	0.50	0.67
52	0.49	0.80
53	3.23	3.23
54	0.42	0.90
55	1.30	0.64
56	0.48	0.45
57	0.00	0.00
58	0.55	0.62
59	0.67	0.60
60	1.11	0.69
61	0.58	0.18
62	3.23	3.22
63	0.50	0.24
64	0.30	0.73
65	0.00	0.00
66	0.48	1.68
67	0.00	0.40
68	0.00	1.56
69	0.00	0.00
70	0.45	0.59
71	0.00	1.21
72	0.00	1.23
73	0.00	1.21
74	3.23	1.22
75	3.23	3.22
76	1.56	1.56
77	1.76	1.76
78	1.61	1.61
79	1.62	1.62
80	3.23	3.21
81	2.92	2.92
82	0.00	0.00
83	0.39	0.50
84	0.00	1.25
85	0.00	0.00
86	0.00	0.00
87	3.23	3.20
88	3.23	3.22
89	1.76	1.75
90	0.07	0.40
91	3.23	3.21
92	0.00	0.00
93	3.23	3.22
94	0.09	0.36

MODE / PIN NO.	EE	PLAY
95	0.16	0.37
96	3.23	3.21
97	0.00	0.00
98	0.92	0.92
99	0.98	0.96
100	0.00	0.00
101	1.76	1.75
102	3.23	3.21
103	0.00	0.00
104	0.00	0.00
105	0.00	0.00
106	0.00	0.00
107	3.23	3.21
108	1.76	1.76
109	0.00	0.00
110	0.19	1.32
111	0.83	0.90
112	3.21	3.21
113	0.91	3.20
114	0.00	0.59
115	0.00	0.00
116	1.28	1.28
117	1.10	0.31
118	0.45	0.24
119	1.28	1.28
120	1.97	0.00
121	0.00	0.00
122	0.00	0.00
123	0.53	0.72
124	0.57	0.72
125	3.23	3.23
126	1.83	0.72
127	0.00	3.23
128	3.22	0.00
129	0.00	0.00
130	1.75	1.41
131	0.00	0.00
132	0.00	0.00
133	0.00	3.21
134	3.23	0.00
135	1.76	1.75
136	0.00	0.00
137	0.00	0.00
138	0.00	0.00
139	0.00	0.00
140	3.27	3.21
141	0.00	0.00
142	0.00	0.00
143	0.00	0.00
144	0.00	0.00
145	3.23	3.21
146	0.00	0.00
147	0.00	0.00
148	0.00	0.00
149	0.00	0.00

MODE / PIN NO.	EE	PLAY
150	0.00	0.00
151	0.00	0.00
152	0.00	0.00
153	0.00	0.00
154	3.23	3.22
155	0.00	0.00
156	3.23	3.21
157	0.00	0.00
158	1.75	0.00
159	1.76	1.76
160	1.84	1.84
161	3.23	3.21
162	0.00	0.00
163	0.00	0.00
164	0.00	0.00
165	0.00	0.00
166	0.00	0.00
167	0.00	0.00
168	0.00	0.00
169	3.23	3.21
170	3.23	3.21
171	0.00	0.00
172	0.00	1.00
173	1.00	1.12
174	0.99	1.14
175	0.19	0.19
176	0.94	1.71
177	0.00	0.00
178	0.98	1.77
179	0.98	1.79
180	0.97	1.04
181	3.23	3.22
182	3.23	3.22
183	0.00	0.00
184	0.00	0.72
185	3.23	0.22
186	3.23	2.44
187	0.00	0.00
188	0.00	0.00
189	1.83	3.22
190	0.00	0.00
191	1.74	0.00
192	1.76	0.36
193	3.23	3.23
194	3.29	0.00
195	3.30	0.00
196	3.23	0.11
197	3.12	0.00
198	0.00	3.23
199	0.00	3.22
200	0.18	3.22
201	0.00	0.00
202	0.17	3.22
203	0.13	3.22
204	0.00	0.00

MODE / PIN NO.	EE	PLAY
205	0.10	3.23
206	0.00	0.00
207	0.18	3.22
208	0.14	0.00
209	0.18	3.22
210	3.23	3.21
211	0.18	3.22
212	1.76	1.24
213	0.11	3.22
214	0.18	2.85
215	0.10	1.61
216	0.10	3.22
217	0.10	3.22
218	0.00	0.00
219	0.05	0.00
220	0.39	3.10
221	0.00	3.09
222	0.18	3.10
223	0.10	0.00
224	3.23	3.21
225	0.00	0.13
226	0.00	0.14
227	0.00	0.73
228	0.00	0.00
229	0.00	0.49
230	0.00	0.00
231	0.00	0.67
232	0.06	0.62
233	3.23	3.22
234	0.06	0.80
235	0.06	0.58
236	0.07	0.45
237	0.00	0.00
238	0.06	0.83
239	0.06	1.47
240	0.06	1.44
AUDIO		
IC401		
1	3.25	3.26
2	3.25	3.26
3	0.00	0.00
4	1.57	1.57
5	1.58	1.58
6	1.54	1.55
7	0.00	0.00
8	3.23	3.26
9	0.75	0.00
10	3.26	3.26
11	4.79	0.03
12	2.27	0.03
13	0.27	4.66
14	2.32	2.29
15	2.30	2.27
16	0.00	0.00
17	4.88	4.82

MODE / PIN NO.	EE	PLAY
18	2.30	2.28
19	2.33	2.29
20	0.27	4.66
IC402		
1	5.40	5.40
2	5.41	5.40
3	5.40	5.40
4	0.00	0.00
5	5.40	5.40
6	5.41	0.00
7	5.42	0.00
8	11.39	11.96
MEMORY		
IC203		
1	3.27	3.05
2	3.25	3.01
3	3.25	3.02
4	0.00	0.00
5	0.05	3.02
6	0.05	3.02
7	0.00	3.25
8	0.05	3.02
9	0.05	3.06
10	0.00	0.00
11	0.05	3.08
12	0.05	3.01
13	0.00	3.23
14	0.00	0.00
15	0.05	3.19
16	0.05	3.19
17	0.05	3.18
18	0.00	0.00
19	0.05	0.00
20	0.05	3.17
21	0.05	0.00
22	0.05	0.00
23	0.05	0.00
24	0.05	0.03
25	0.00	3.25
26	0.00	0.00
27	0.05	0.03
28	0.05	0.03
29	0.05	0.03
30	0.05	0.03
31	0.05	0.03
32	0.00	0.03
33	0.00	0.00
34	0.00	3.25
35	0.05	1.62
36	0.05	0.01
37	0.00	0.00
38	0.00	3.25
39	0.05	3.05
40	0.05	3.05
41	0.00	0.00

MODE / PIN NO.	EE	PLAY
42	0.05	3.05
43	0.00	3.04
44	0.00	3.25
45	0.00	3.05
46	0.00	3.04
47	0.00	0.00
48	0.00	3.04
49	0.05	3.04
50	0.00	0.00
IC3F1		
1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	0.00	0.00
6	0.00	0.00
7	0.00	0.00
8	0.00	0.00
9	2.38	2.78
10	0.00	0.00
11	0.00	3.23
12	3.26	3.26
13	3.26	3.26
14	0.00	0.00
15	0.00	0.00
16	3.26	1.40
17	0.00	0.00
18	0.00	0.00
19	0.00	0.00
20	0.00	0.00
21	0.00	0.00
22	0.00	0.00
23	0.00	0.00
24	0.00	1.76
25	3.23	3.15
26	3.26	3.26
27	0.00	0.00
28	3.23	3.22
29	1.98	1.76
30	0.00	0.00
31	1.91	1.90
32	0.00	0.00
33	1.45	1.65
34	0.00	0.00
35	1.45	1.90
36	0.00	0.00
37	3.26	3.26
38	0.19	0.19
39	0.00	0.00
40	2.09	2.16
41	0.00	0.00
42	1.19	2.19
43	0.00	0.00
44	1.95	2.11
45	0.00	0.00

MODE / PIN NO.	EE	PLAY
46	0.00	0.00
47	3.26	3.26
48	0.00	0.00
IC305		
1	3.23	3.23
2	0.52	0.62
3	0.11	3.22
4	0.30	0.57
5	0.60	0.76
6	0.00	0.00
7	0.47	0.00
8	0.00	0.00
9	0.00	0.00
10	0.40	0.00
11	0.39	0.00
12	0.00	0.00
13	0.42	0.00
14	0.48	0.00
15	3.24	3.25
16	0.11	0.00
17	0.10	3.16
18	0.09	0.00
19	0.05	0.00
20	0.00	0.00
21	0.00	0.00
22	0.00	3.16
23	1.58	0.00
24	0.05	0.00
25	1.81	3.16
26	1.50	3.16
27	1.54	3.20
28	0.00	3.16
29	3.24	0.00
30	0.00	0.00
31	0.63	0.00
32	0.00	3.16
33	0.45	0.00
34	0.95	1.79
35	3.23	0.00
36	0.69	3.20
37	1.10	0.00
38	0.00	0.00
39	0.64	0.00
40	0.54	0.00
41	3.24	3.25
42	0.55	0.00
43	3.23	3.25
44	0.00	0.00
45	0.29	0.00
46	0.30	0.00
47	0.40	0.00
48	0.62	0.00
49	0.65	3.26
50	0.62	0.00
51	0.45	0.00

MODE / PIN NO.	EE	PLAY
52	0.00	0.00
53	0.57	0.00
54	0.34	0.00
55	0.28	3.25
56	0.52	0.00
57	0.00	0.02
58	0.00	0.00
59	0.00	0.00
60	1.64	0.00
61	0.95	0.00
62	0.95	3.16
63	1.49	0.00
64	1.61	3.16
65	0.00	0.00
66	0.00	0.00
67	3.14	3.16
68	2.26	0.00
69	0.00	0.00
70	0.00	0.00
71	0.00	0.00
72	0.00	0.00
73	0.00	0.00
74	0.30	0.00
75	3.24	3.26
76	0.39	0.00
77	0.40	0.00
78	0.00	0.00
79	0.66	0.00
80	0.46	0.00
81	3.24	3.26
82	0.59	0.00
83	0.31	0.00
84	0.00	0.00
85	0.53	0.00
86	0.00	0.00
ETC		
IC502		
1	0.00	0.00
2	5.05	5.05
3	1.18	0.62
4	0.72	1.69
5	0.00	0.00
6	5.06	5.04
7	0.00	0.00
8	5.06	5.04
IC503		
1	0.00	0.00
2	3.13	3.12
3	5.05	5.05
4	0.00	3.12
5	0.00	0.64
6	0.00	0.00
7	2.67	2.65
8	0.00	3.24
9	0.00	0.00

MODE / PIN NO.	EE	PLAY
10	0.00	0.00
11	0.52	1.67
12	0.50	5.18
13	1.70	1.70
14	0.00	0.00
15	0.82	0.38
16	0.00	5.17
17	3.11	3.11
18	5.18	5.17
19	0.00	0.00
20	5.18	5.18
IC506		
1	3.25	3.25
2	0.00	0.00
3	1.81	1.81

MODE / PIN NO.	STOP	PLAY
CONNECTOR		
PDV02		
1	0.00	0.00
2	0.00	0.00
3	1.55	1.55
4	0.00	0.00
5	0.00	0.00
6	0.00	0.00
7	4.92	4.92
8	5.20	5.20
9	5.06	5.06
10	0.00	0.00
11	1.12	1.16
12	0.00	0.00
PDV03		
1	0.87	0.65
2	0.00	0.00
3	1.44	0.00
4	0.00	0.00
5	1.28	1.32
6	0.00	0.00
7	0.43	0.28
8	0.00	0.00
9	0.00	0.32
10	0.00	2.52
11	0.00	0.00
12	0.00	0.00
13	0.00	0.00
14	0.75	1.38
15	0.26	0.47
PMD02		
1	5.10	5.07
2	1.37	2.20
3	0.00	0.00
4	0.00	0.00
5	0.00	0.00
6	0.00	0.00
7	2.28	2.27
8	5.10	5.07
9	2.28	2.49
10	2.28	2.50
11	2.29	2.39
12	2.29	2.40
13	2.29	2.39
14	2.29	2.40
15	3.96	4.22
16	4.00	4.01
17	3.97	3.97
18	3.99	3.82
19	5.10	5.07
20	0.00	0.00
21	0.00	1.82
22	0.00	0.23
23	0.00	0.00

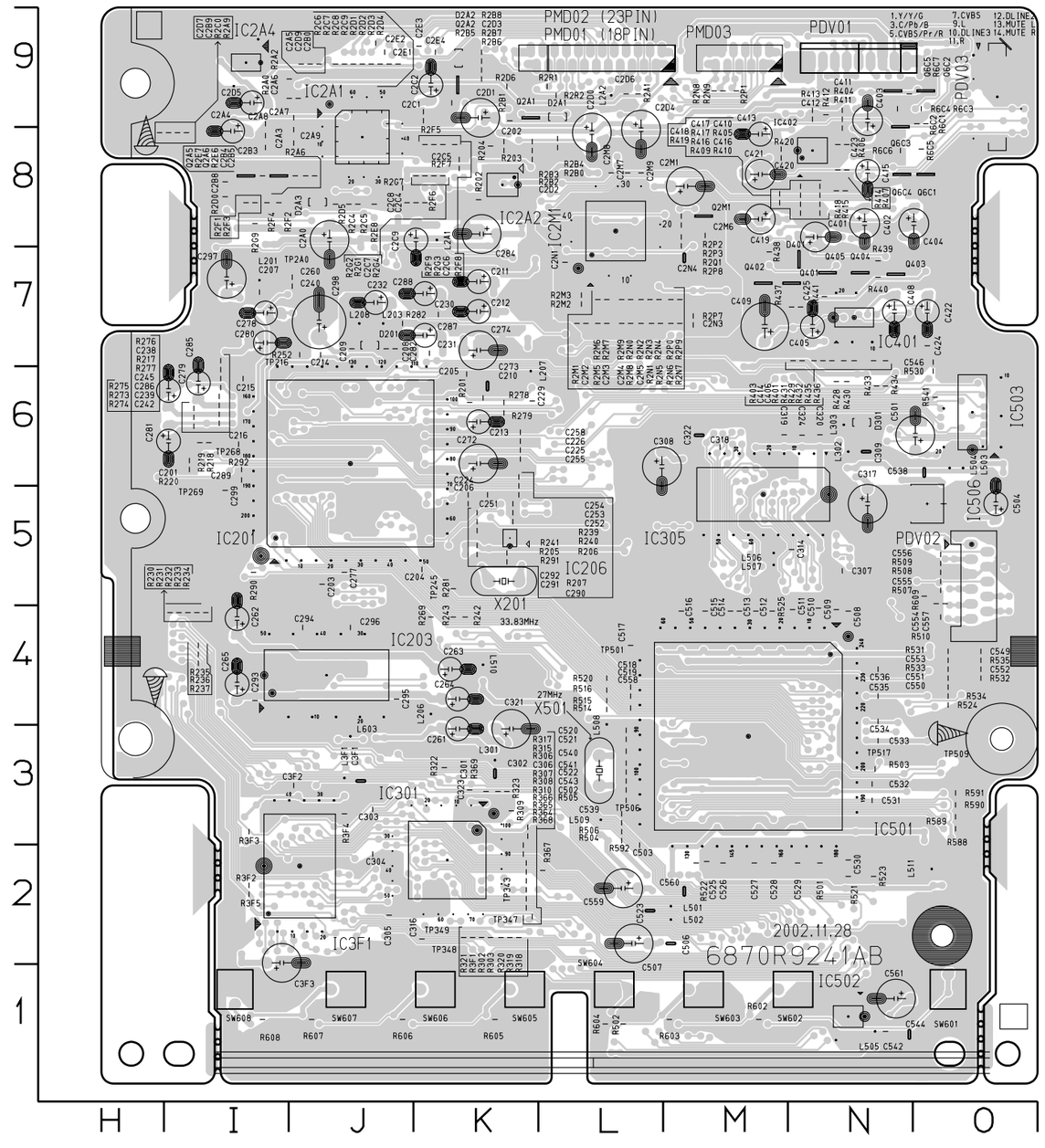
MODE / PIN NO.	STOP	PLAY
PMD03		
1	1.21	5.04
2	1.21	3.00
3	4.01	4.06
4	3.97	3.93
5	3.97	4.02
6	3.97	4.02
7	0.00	5.07
8	5.10	0.00
9	0.00	0.00
10	5.10	5.07
11	0.00	0.00

MODE / PIN NO.	EE	PLAY
CAPACITOR		
C3F3	3.25	
C293	3.25	
C262	3.25	
C281	1.60	
C279	2.14	
C285	2.07	
C297	3.25	
C280	2.71	
C278	2.13	
C208	3.25	
C240	5.02	
C232	3.23	
C231	2.07	
C288	2.06	
C2C9	5.02	
C284	3.24	
C211	1.62	
C212	0.82	
C274	3.25	
C213	2.42	
C272	2.15	
C263	3.25	
C264	3.25	
C261	3.25	
C321	3.25	
C2D5	2.26	
C2A4	5.02	
C2C2	2.27	
C2D1	5.02	
C507	3.19	
C539	3.19	
C561	5.04	
C504	3.25	
C308	3.24	
C317	3.24	
C309	1.79	
C409	4.86	
C405	3.25	
C408	2.22	
C422	4.78	
C404	5.40	
C402	5.39	
C401	5.40	
C419	5.41	
C420	5.40	
C415	5.40	
C403	5.39	
C413	11.97	
C2M1	7.94	
C2D4	5.04	
C2M8	5.02	

MODE / PIN NO.	STOP	PLAY
Q2A1		
E	5.09	5.05
B	5.09	5.24
C	0.00	0.00
Q2A2		
E	5.07	0.00
B	5.07	0.00
C	0.00	1.82
Q2A5		
E	2.83	2.36
B	3.21	3.12
C	5.09	3.84
Q2A6		
E	2.29	2.43
B	3.11	3.20
C	2.70	3.66
Q2M1		
E	0.00	0.00
B	0.00	0.00
C	3.26	3.23
Q401		
E	5.17	5.17
B	4.48	0.00
C	5.17	0.00
Q404		
E	1.55	0.00
B	0.00	0.00
C	0.75	0.00
Q405		
E	1.56	0.00
B	0.00	0.00
C	0.75	0.00

PRINTED CIRCUIT DIAGRAMS

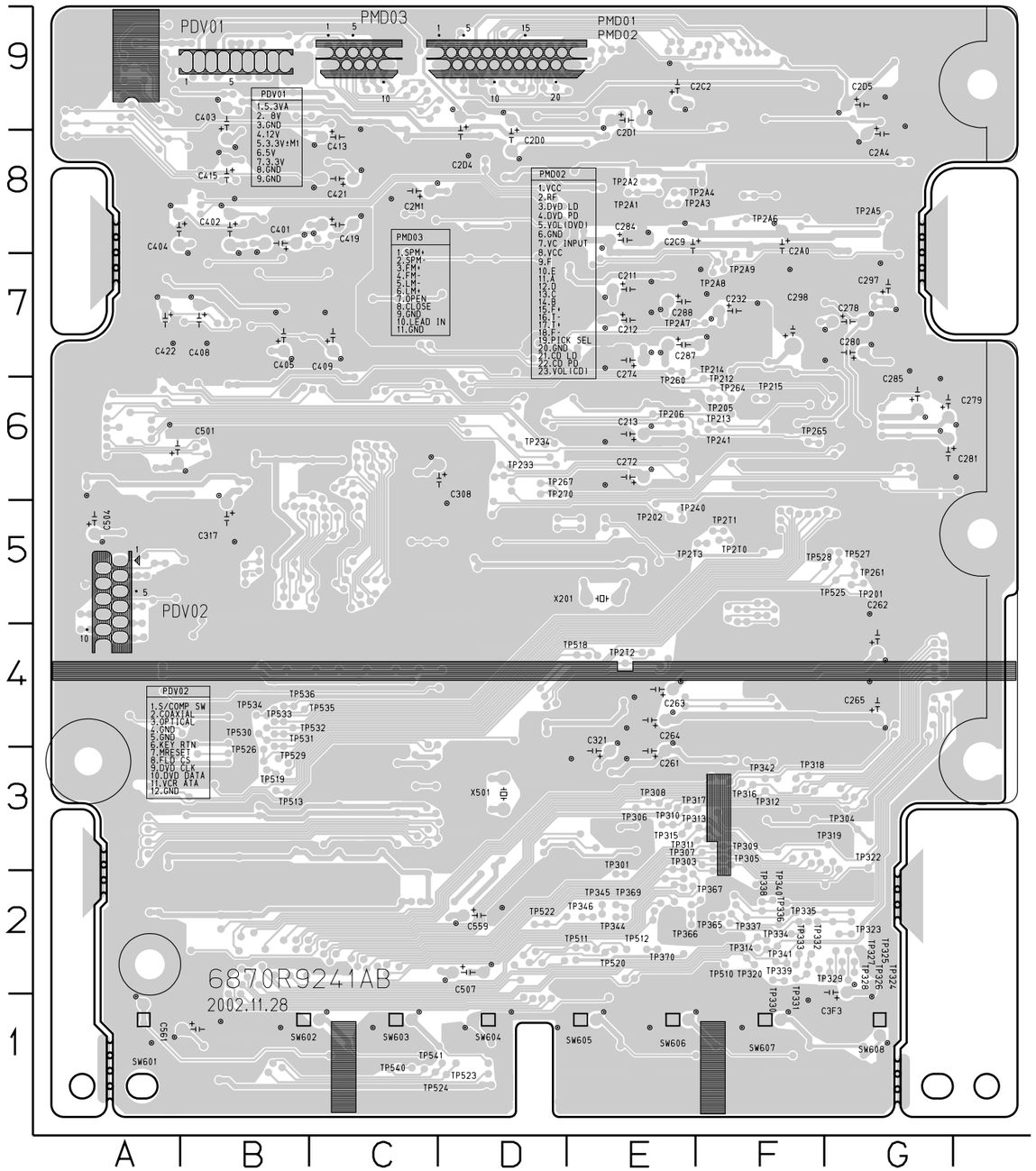
1. MAIN P.C.BOARD (TOP VIEW)



LOCATION GUIDE

C201	I6	C293	I4	C305	J2	C518	L4	IC502	N1	R230	I4	R2F1	I8	R364	K2	R522	M2
C202	K8	C294	J4	C306	K2	C519	L4	IC503	06	R231	I4	R2F2	I8	R365	K2	R523	N2
C203	J5	C295	J4	C307	N5	C520	L3	IC506	05	R232	I4	R2F3	I8	R366	K2	R524	04
C204	K5	C296	J4	C308	L6	C521	L3	L201	I7	R233	I4	R2F4	I8	R367	L2	R525	M4
C205	K6	C297	I7	C309	N6	C522	L3	L203	J7	R234	I4	R2F5	K9	R368	K2	R530	06
C206	K5	C298	J7	C314	N5	C523	L2	L206	K4	R235	I4	R2F6	K8	R369	K3	R531	04
C207	I7	C299	I5	C316	K2	C525	M2	L207	K6	R236	I4	R2F7	K8	R3F1	K2	R532	04
C208	J7	C2A0	J8	C317	N5	C526	M2	L208	J7	R237	I4	R2F8	K8	R3F2	I2	R533	04
C209	J7	C2A3	I8	C318	M6	C527	M2	L2A1	K8	R239	K5	R2F9	K8	R3F3	I3	R534	04
C210	K6	C2A4	I8	C319	M6	C528	M2	L2A2	L9	R240	K5	R2G1	K8	R3F4	J3	R535	04
C211	K7	C2A5	J9	C320	N6	C529	N2	L301	K3	R241	K5	R2G2	K8	R3F5	I2	R541	06
C212	K7	C2A6	J9	C321	K3	C530	N2	L302	N6	R242	K4	R2G3	K8	R401	N7	R588	03
C213	K6	C2A7	J9	C322	M6	C531	N3	L303	N6	R243	K4	R2G4	K8	R403	N7	R589	03
C214	J7	C2A8	I9	C323	K3	C532	N3	L3F1	J3	R252	J7	R2G7	J8	R404	N9	R590	03
C215	I6	C2A9	J8	C324	N6	C533	N3	L501	M2	R269	K4	R2G9	I8	R405	N8	R591	03
C216	I6	C2B0	J9	C3F1	J3	C534	N4	L502	M2	R273	I6	R2M1	L7	R406	N8	R592	L3
C224	K5	C2B3	I8	C3F2	J3	C535	N4	L503	06	R274	I6	R2M2	L7	R407	N8	R602	M1
C225	K6	C2B4	J8	C3F3	I2	C536	N4	L504	06	R275	I6	R2M3	L7	R409	N8	R603	M1
C226	K6	C2B5	J8	C401	N8	C538	06	L505	N1	R276	I7	R2M5	L7	R410	N8	R604	L1
C229	K6	C2B8	I8	C402	N8	C539	L3	L506	M5	R277	I6	R2M6	L7	R411	N8	R605	K1
C230	K7	C2B9	I8	C403	N9	C540	L3	L507	M5	R278	K6	R2M7	L7	R412	N9	R606	J1
C231	K7	C2C1	K9	C404	08	C541	L3	L508	L3	R279	K6	R2M8	L7	R413	N9	R607	J1
C232	J7	C2C2	K9	C405	N7	C542	N1	L509	L3	R281	K5	R2M9	L7	R414	N8	R608	I1
C238	I6	C2C4	K8	C406	N7	C543	L3	L510	K4	R282	J7	R2N0	L7	R415	N8	R609	05
C239	I6	C2C5	K8	C408	N7	C544	N1	L511	02	R290	I5	R2N1	L7	R416	N8	R6C1	09
C240	J7	C2C6	K8	C409	M7	C546	07	L603	J3	R291	K5	R2N2	L7	R417	N8	R6C2	09
C242	I6	C2C7	K8	C410	N8	C549	04	PDV01	N9	R292	I6	R2N3	L7	R418	N8	R6C3	09
C245	I6	C2C8	J8	C411	N9	C550	04	PDV02	05	R2A0	J9	R2N4	L7	R419	M8	R6C4	N9
C251	K5	C2C9	K8	C412	N9	C551	04	PDV03	09	R2A1	L9	R2N5	L7	R420	M8	R6C5	08
C252	K5	C2D0	L8	C413	M8	C552	04	PMD01	L9	R2A2	J9	R2N6	M7	R428	N6	R6C6	N8
C253	K5	C2D1	K9	C414	N7	C553	04	PMD02	L9	R2A6	J8	R2N7	M7	R429	N7	R6C7	N9
C254	K6	C2D2	K8	C415	N8	C554	05	PMD03	M9	R2A9	I8	R2N8	M9	R430	N6	SW601	01
C255	K6	C2D3	K9	C416	N8	C555	05	Q2A1	K9	R2B0	L8	R2N9	M9	R431	N7	SW602	N1
C258	K6	C2D4	L8	C417	N8	C556	05	Q2A2	K9	R2B1	K9	R2P0	M7	R432	N7	SW603	M1
C260	J7	C2D5	I9	C418	M8	C557	05	Q2A5	I8	R2B2	K8	R2P1	M9	R433	N6	SW604	L1
C261	K3	C2D6	L9	C419	M8	C558	L4	Q2A6	I8	R2B3	K8	R2P2	M8	R434	N6	SW605	K1
C262	I4	C2D7	H8	C420	M8	C559	L2	Q2M1	M8	R2B4	L8	R2P3	M8	R435	N7	SW606	K1
C263	K4	C2D9	J9	C421	M8	C560	M2	Q401	N7	R2B5	K9	R2P7	M7	R436	N7	SW607	J1
C264	K4	C2E1	J9	C422	07	C561	N1	Q402	M7	R2B6	K9	R2P8	M8	R437	N7	SW608	I1
C265	I4	C2E2	J9	C423	N8	D201	J7	Q403	N7	R2B7	K9	R2P9	M7	R438	M7	TP216	J7
C272	K6	C2E3	K9	C424	07	D2A1	L9	Q404	N7	R2B8	K9	R2Q1	M8	R439	N7	TP245	K5
C273	K6	C2E4	K9	C425	N7	D2A2	K9	Q405	N7	R2C0	I8	R2R1	L9	R440	N7	TP268	I6
C274	K7	C2M1	M8	C501	06	D2A3	J8	Q6C1	08	R2C4	J8	R2R2	L9	R441	N7	TP269	I6
C277	J5	C2M2	L7	C502	L3	D301	N6	Q6C2	09	R2C5	J8	R302	K2	R501	N2	TP2A0	J7
C278	I7	C2M3	L7	C503	L2	D401	N7	Q6C3	N8	R2C6	J9	R303	K2	R502	L1	TP343	K2
C279	I6	C2M4	L7	C504	05	IC201	J6	Q6C4	N8	R2C7	J9	R306	K2	R503	N3	TP347	K2
C280	I7	C2M5	L7	C506	M2	IC203	J4	Q6C5	N9	R2C8	J9	R307	K2	R504	L3	TP348	K2
C281	I6	C2M6	M8	C507	L2	IC206	K5	R201	K6	R2C9	J9	R308	K2	R505	L3	TP349	K2
C282	J7	C2M7	L8	C508	N4	IC2A1	J8	R202	K8	R2D0	I8	R309	K3	R506	L3	TP501	L4
C284	K8	C2M8	L8	C509	N4	IC2A2	K8	R203	K8	R2D1	J9	R310	K2	R507	05	TP506	L3
C285	I6	C2M9	L8	C510	N4	IC2A4	I9	R204	K8	R2D2	J9	R315	K3	R508	05	TP509	03
C286	I6	C2N1	L7	C511	N4	IC2M1	L8	R205	K5	R2D3	J9	R317	K3	R509	05	TP517	N3
C287	K7	C2N3	M7	C512	M4	IC301	K2	R206	K5	R2D4	J9	R318	K2	R510	04	X201	K5
C288	K7	C2N4	M7	C513	M4	IC305	M5	R207	K5	R2D5	J8	R319	K2	R514	L4	X501	L3
C289	I6	C301	K3	C514	M4	IC3F1	J2	R217	I6	R2D6	K9	R320	K2	R515	L4		
C290	K5	C302	K3	C515	M4	IC401	N7	R218	I6	R2E6	J8	R321	K2	R516	L4		
C291	K5	C303	J3	C516	M4	IC402	N8	R219	I6	R2E7	I8	R322	K3	R520	L4		
C292	K5	C304	J2	C517	L4	IC501	M3	R220	I6	R2E8	J8	R323	K3	R521	N2		

2. MAIN P.C.BOARD (BOTTOM VIEW)



LOCATION GUIDE

TP201	G5	TP324	G2
TP202	E5	TP325	G2
TP205	F6	TP326	G2
TP206	E6	TP327	G2
TP212	F6	TP328	G2
TP213	F6	TP329	F2
TP214	E7	TP330	F2
TP215	F6	TP331	F2
TP233	D6	TP332	F2
TP234	D6	TP333	F2
TP240	E5	TP334	F2
TP241	F6	TP335	F2
TP260	E7	TP336	F2
TP261	G5	TP337	F2
TP264	F6	TP338	F2
TP265	F6	TP339	F2
TP267	D6	TP340	F2
TP270	D6	TP341	F2
TP2A1	E8	TP342	F3
TP2A2	E8	TP344	E2
TP2A3	E8	TP345	E2
TP2A4	E8	TP346	E2
TP2A5	G8	TP365	F2
TP2A6	F8	TP366	E2
TP2A7	E7	TP367	F2
TP2A8	F7	TP369	E2
TP2A9	F7	TP370	E2
TP2T0	F5	TP510	F2
TP2T1	F5	TP511	E2
TP2T2	E4	TP512	E2
TP2T3	F5	TP513	B3
TP301	E2	TP518	E4
TP303	F3	TP519	B3
TP304	G3	TP520	E2
TP305	F3	TP522	D2
TP306	E3	TP523	D1
TP307	F3	TP524	C1
TP308	E3	TP525	G5
TP309	F3	TP526	B3
TP310	E3	TP527	G5
TP311	F3	TP528	G5
TP312	F3	TP529	B3
TP313	F3	TP530	B4
TP314	F2	TP531	B4
TP315	E3	TP532	B4
TP316	F3	TP533	B4
TP317	F3	TP534	B4
TP318	F3	TP535	B4
TP319	G3	TP536	B4
TP320	F2	TP540	C1
TP322	G3	TP541	C1
TP323	G2		

SECTION 4 MECHANISM OF VCR PART
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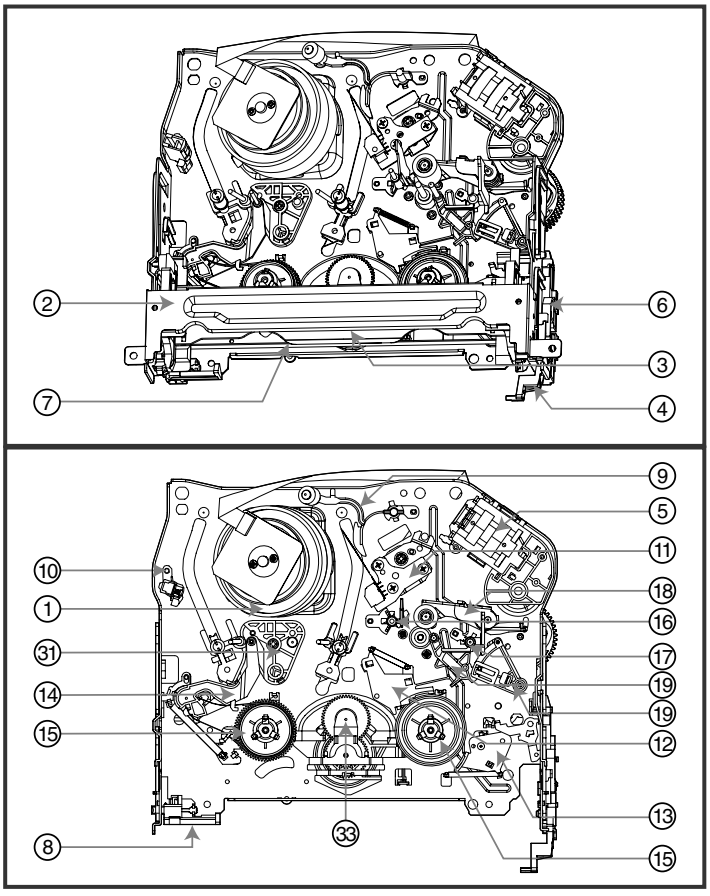
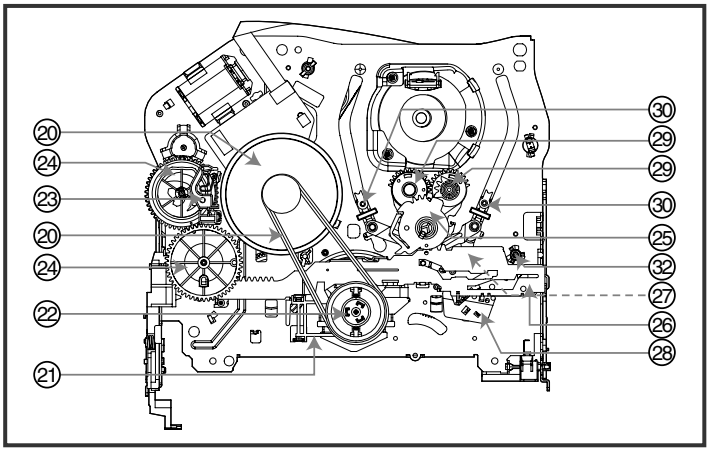
DECK MECHANISM PARTS LOCATIONS

• Top View



• Bottom View



NOTE : When reassembly perform the procedure in the reverse order.

1) When reassembling, confirm Mechanism and Mode Switch Alignment Position (Refer to Page 4-13)
2) When disassembling, the Parts for Starting No. Should be removed first.

Procedure / Starting No.		Part	Fixing Type	Figure	View
	1	Drum Assembly	3 Screw	A-1	T
	2	Plate Top	2 Hook	A-2	T
2	3	Holder Assembly CST	Chassis Hole	A-2	T
2	4	Opener Door	Chassis Hole	A-2	T
	5	Bracket Assembly L/D Motor	3 Hook	A-2	T
2,3,4	6	Gear Assembly Rack F/L	1 Hook, Chassis Hole	A-2	T
2,3,4,6	7	Arm Assembly F/L	Chassis Hole	A-2	T
	8	Lever Assembly S/W	1 Hook	A-2	T
	9	Arm Assembly Cleaner	Chassis Embossing	A-3	T
	10	Head F/E	Chassis Embossing	A-3	T
	11	Base Assembly A/C Head	1 Screw	A-3	T
2,3	12	Brake Assembly T	1 Hook	A-4	T
2,3	13	Brake Assembly RS	1 Hook	A-4	T
2,3	14	Arm Assembly Tension	2 Hook	A-4	T
2,3,12,13, 14	15	Reel S/Reel T		A-4	T
	16	Base Assembly P4	Chassis Embossing	A-5	T
	17	Opener Lid	Chassis Embossing	A-5	T
17	18	Arm Assembly Pinch	Shaft	A-5	T
17	19	Lever T/Up / Arm T/Up	1 Hook	A-5	T
17,18	20	Belt Capstan/Motor Capstan	3 Screw	A-6	B
	21	Lever F/R	Locking Tab	A-6	B
20, 21	22	Clutch Assembly D35	Washer	A-6	B
	23	Brake Assembly Capstan	Locking Tab	A-6	B
	24	Gear Drive/Gear Cam	Washer/Hook	A-7	B
	25	Gear Sector	1 Hook	A-7	B
20,21,23, 24,25	26	Plate Slider	Shaft Guide	A-7	B
20,21,23, 24,25,26	27	Lever Tension	1 Hook	A-7	B
2,3,14,20, 21,25,23, 24,26	28	Lever Spring	Locking Tab	A7	B
25	29	Gear Assembly P2/Gear Assembly P3	Boss	A-8	B
2,3,14,25, 29	30	Base Assembly P2/Base Assembly P3	Chassis Slot	A-8	B
2,3,14,25, 29	31	Base Loading	1 Screw	A-9	T
2,3,14	32	Base Tension	Chassis Embossing	A-9	B
2,3,20,21, 22	33	Arm Assembly Idler	Locking Tab	A-9	T

T:Top, B:Bottom

DECK MECHANISM DISASSEMBLY

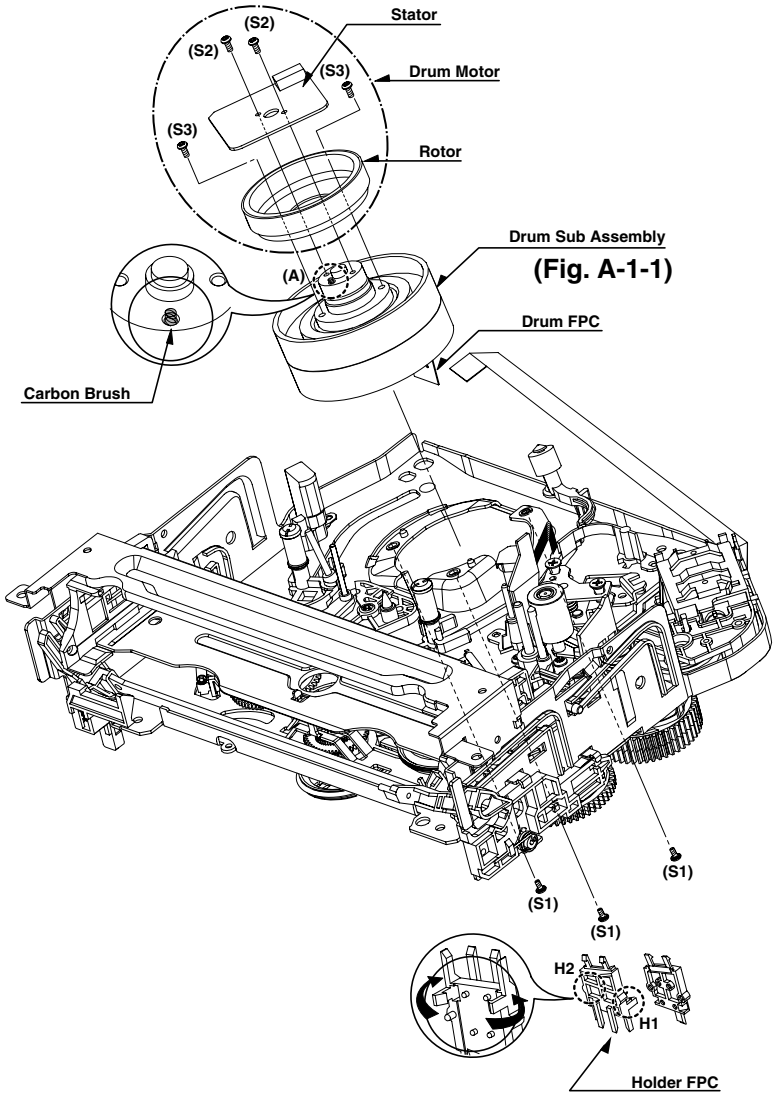


Fig. A-1

1. Drum Assembly (Fig. A-1-1)

1) Unplug the Drum FPC Connector.
2) Remove three Screws(S1) on bottom side and separate the Drum assembly.
3) Unhook (H1), (H2) and separate the Holder FPC and Cap FPC.

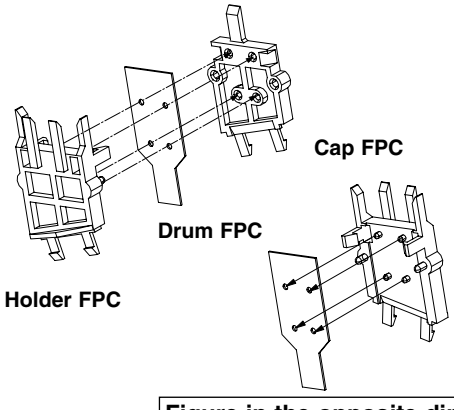
1-1. Drum Motor

1) Remove two Screws(S2) and disassemble the Stator of the Drum Motor.
2) Remove two Screws(S3) and separate the Rotor of the Drum Motor from the Drum Sub assembly.

NOTE

When reassembling, confirm (A) portion of the Drum Sub assembly whether the Carbon Brush is in there or not.

(Fig. B-1)



DECK MECHANISM DISASSEMBLY

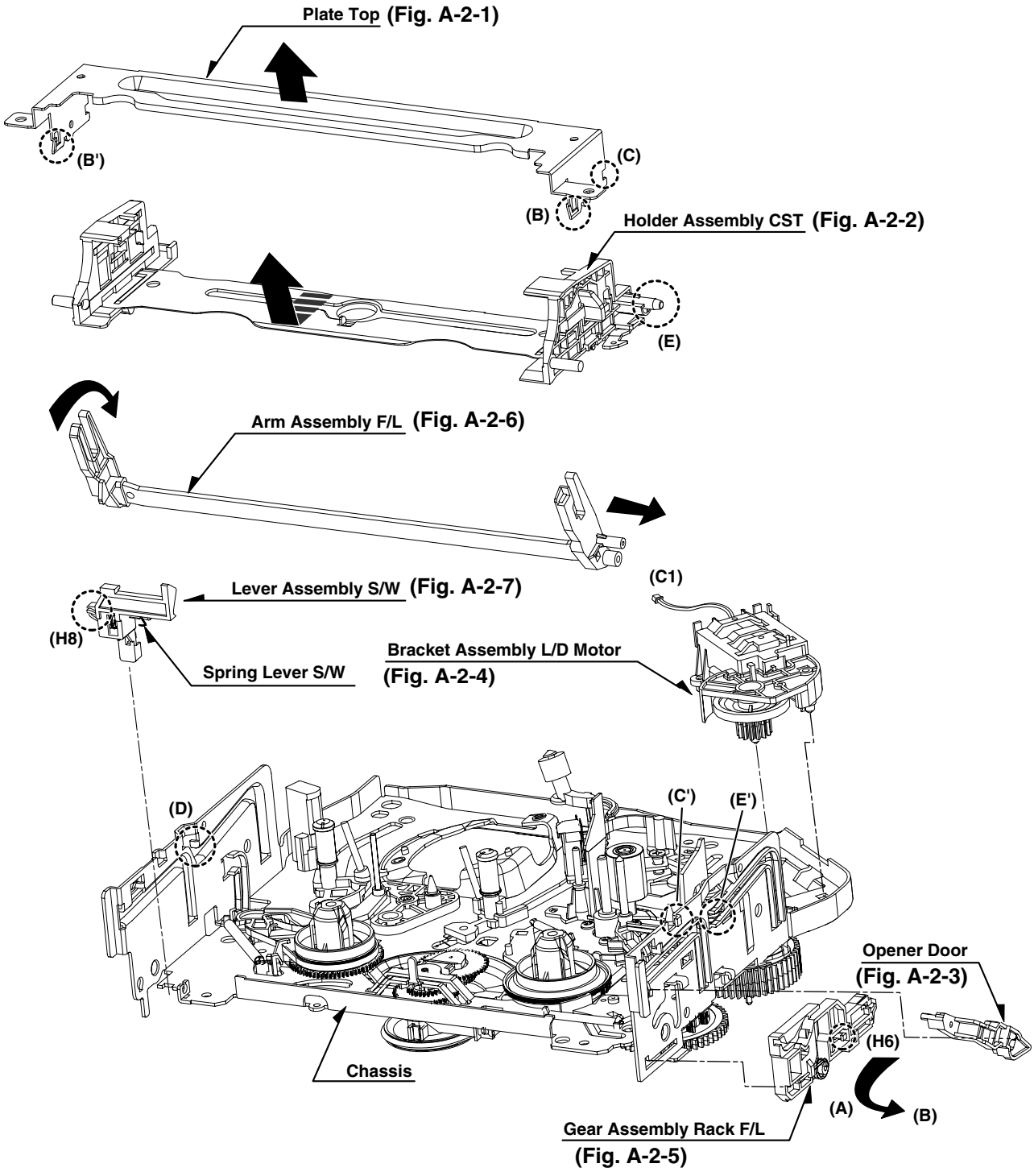


Fig. A-2

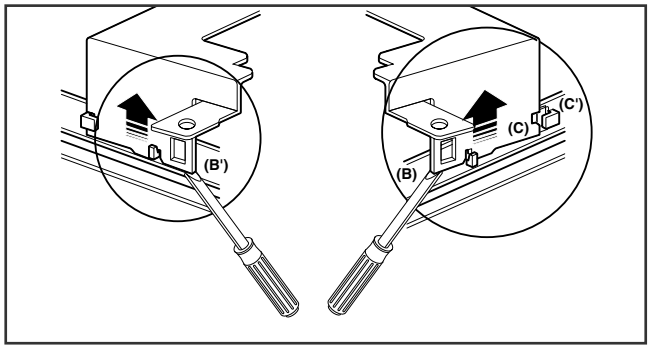
DECK MECHANISM DISASSEMBLY

2. Plate Top (Fig. A-2-1)

1) Pull the (B) portion of the Plate Top back in direction of arrow and separate the right side of it.
2) pull the (B') portion of the Plate Top back in direction of arrow and separate the left side of it.
   (Used tools : (-) type driver, anything tool with sharp point or flat point.)

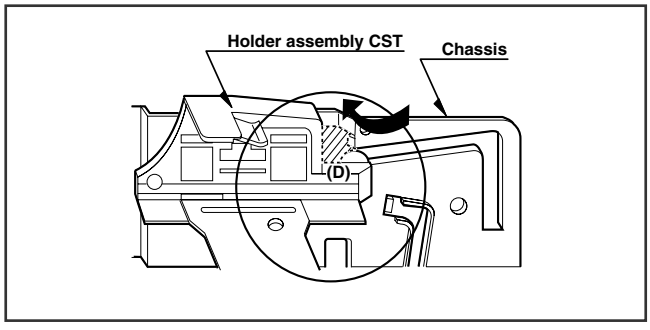
NOTE

(1) When reassembling, push the Plate Top after alignment the two position(C), (C') as below Fig.



3. Holder Assembly CST (Fig.A-2-2)

1) Move the Holder Assembly CST in direction of arrow and separate the left side of it first through the (D) position of the Chassis.



2) Disassemble the right side of the Holder Assembly CST from each guided hole of the Chassis.

NOTE

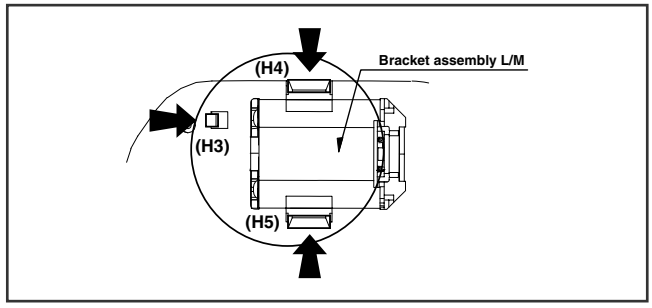
When reassembling, insert the (E) part of the Holder Assembly CST in the (E') hole of the Chassis first and assemble the left side of it.

4. Opener Door (Figure. A-2-3)

1) Turn the Opener Door clockwise and remove it through the guide hole of the Chassis.

5. Bracket Assembly L/D Motor (Fig. A-2-4)

1) Unplug the Connector(C1).
2) Unhook three Hooks(H3, H4, H5) on bottom side of the Chassis, lift up the Bracket Assembly L/M and disassemble the Bracket Assembly L/D Motor.

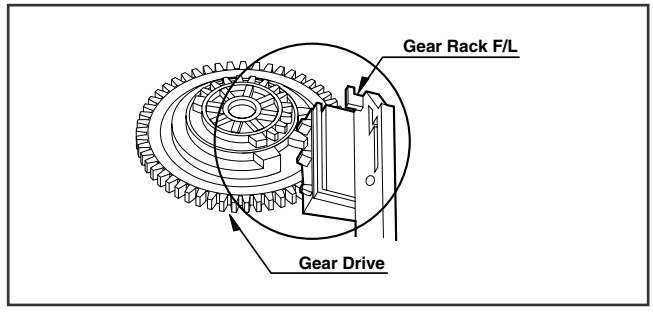


6. Gear Assembly Rack F/L (Fig. A-2-5)

1) Move the Gear Assembly Rack F/L in direction of arrow(A) and unhook the Hook(H6) pulling back in front.
2) Separate the Gear Rack F/L in direction of arrow(B).

NOTE

When reassembling, align the gear part of the Gear Assembly Rack F/L with the Gear Drive as below Fig.

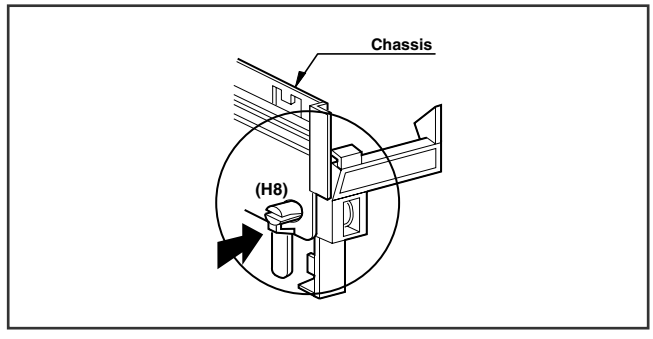


7. Arm Assembly F/L (Fig. A-2-6)

1) Move the Arm Assembly F/L in direction of arrow and separate the left side of it first.
2) Disassemble the Arm Assembly F/L from each guided hole of the Chassis.

8. Lever Assembly S/W(Fig. A-2-7)

1) Unhook the Hook(H8) in the left side of the Chassis and remove the Lever Assembly S/W.



DECK MECHANISM DISASSEMBLY

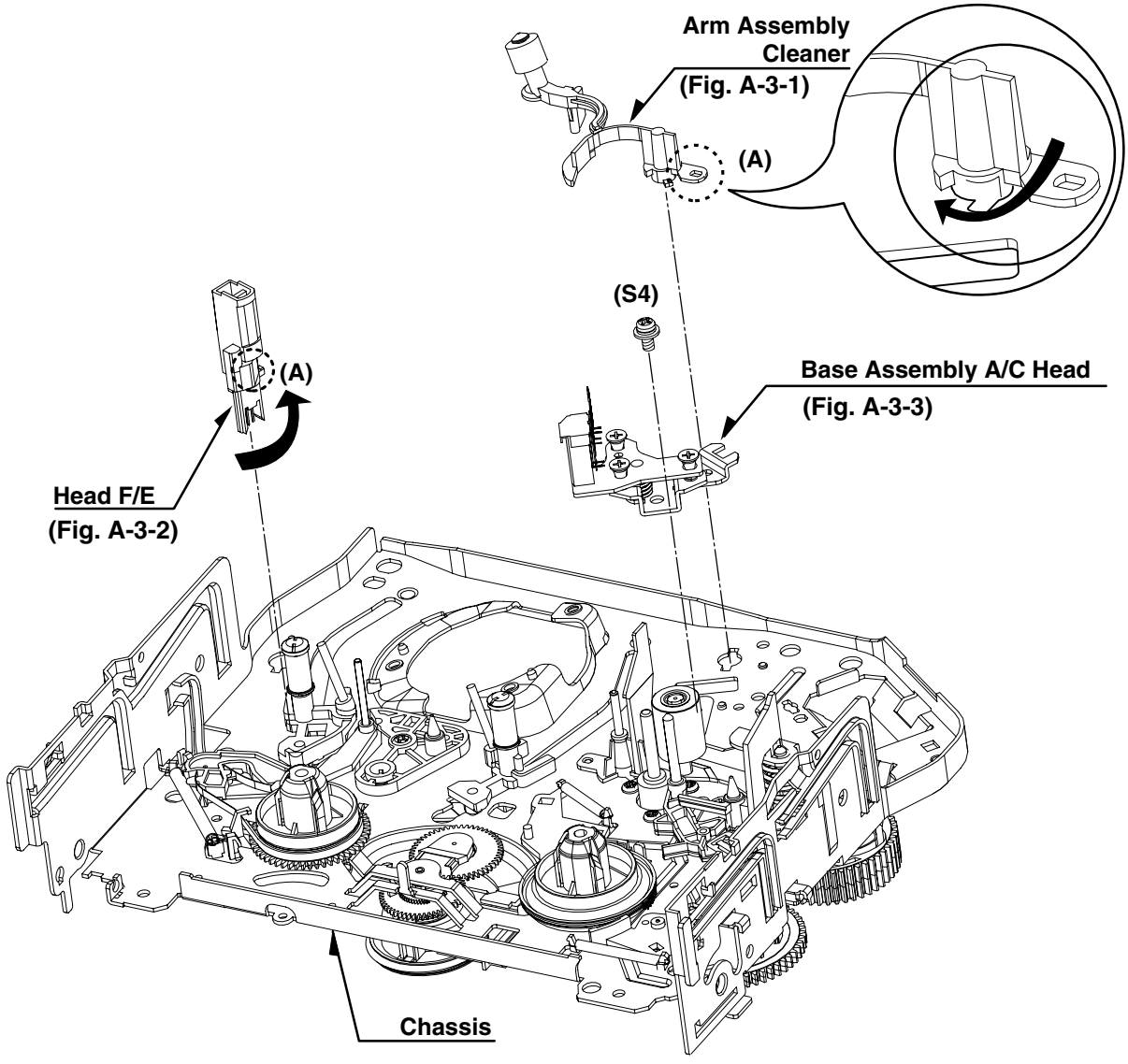


Fig. A-3

9. Arm Assembly Cleaner (Fig. A-3-1)

1) Breakaway the (A) portion as Fig. A-3-1 from the embossing of the Chassis, turn the Arm assembly Cleaner to clockwise direction and lift it up.

10. Head F/E (Fig. A-3-2)

1) Breakaway the (A) portion of the Head F/E from the embossing of the Chassis, turn it to counterclockwise direction and lift it up.

11. Base Assembly A/C Head (Fig. A-3-3)

1) Remove the Screw(S4) and lift the Base Assembly A/C Head up.

DECK MECHANISM DISASSEMBLY

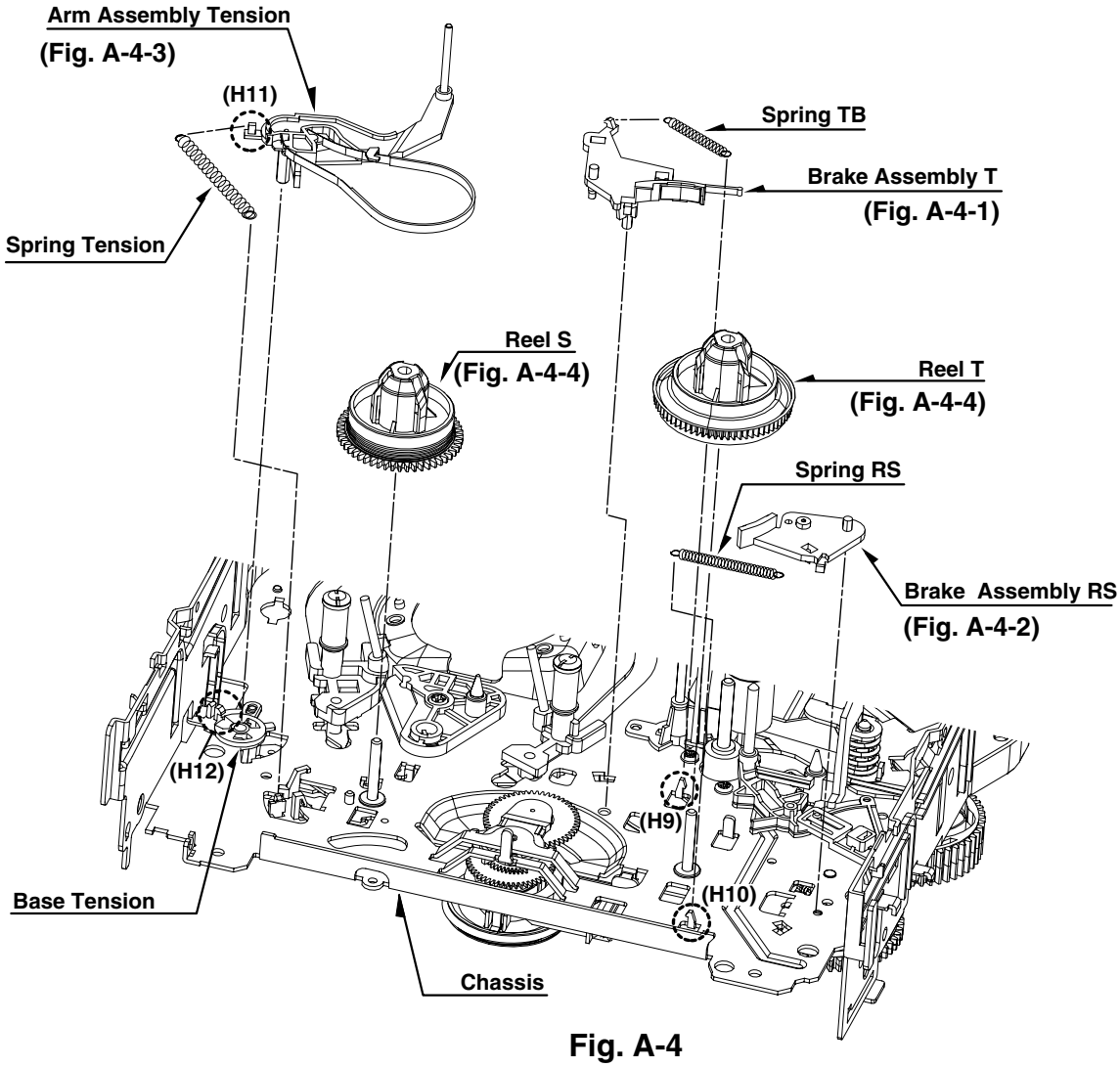


Fig. A-4

12. Brake Assembly T (Fig. A-4-1)

1) Unhook the Spring TB from the Hook(H9) of the Chassis.
2) Lift the Brake Assembly T up.

13. Brake Assembly RS (Fig. A-4-2)

1) Unhook the Spring RS from the Hook(H10) of the Chassis.
2) Lift the Brake Assembly T up.

14. Arm Assembly Tension (Fig. A-4-3)

1) Unhook the Spring Tension from the Hook(H11) of the Arm Assembly Tension.
2) Unhook the Hook(H12) of the Base Tension and lift the Arm Assembly Tension up.

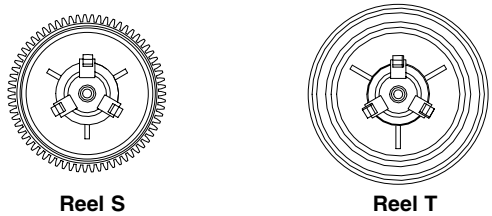
NOTE

Difference for Springs

	Spring TB
	Spring RS **Color (Black)**
	Spring Tension

15. Reel S / Reel T (Fig. A-4-4)

1) Difference for Reel S / Reel T



DECK MECHANISM DISASSEMBLY

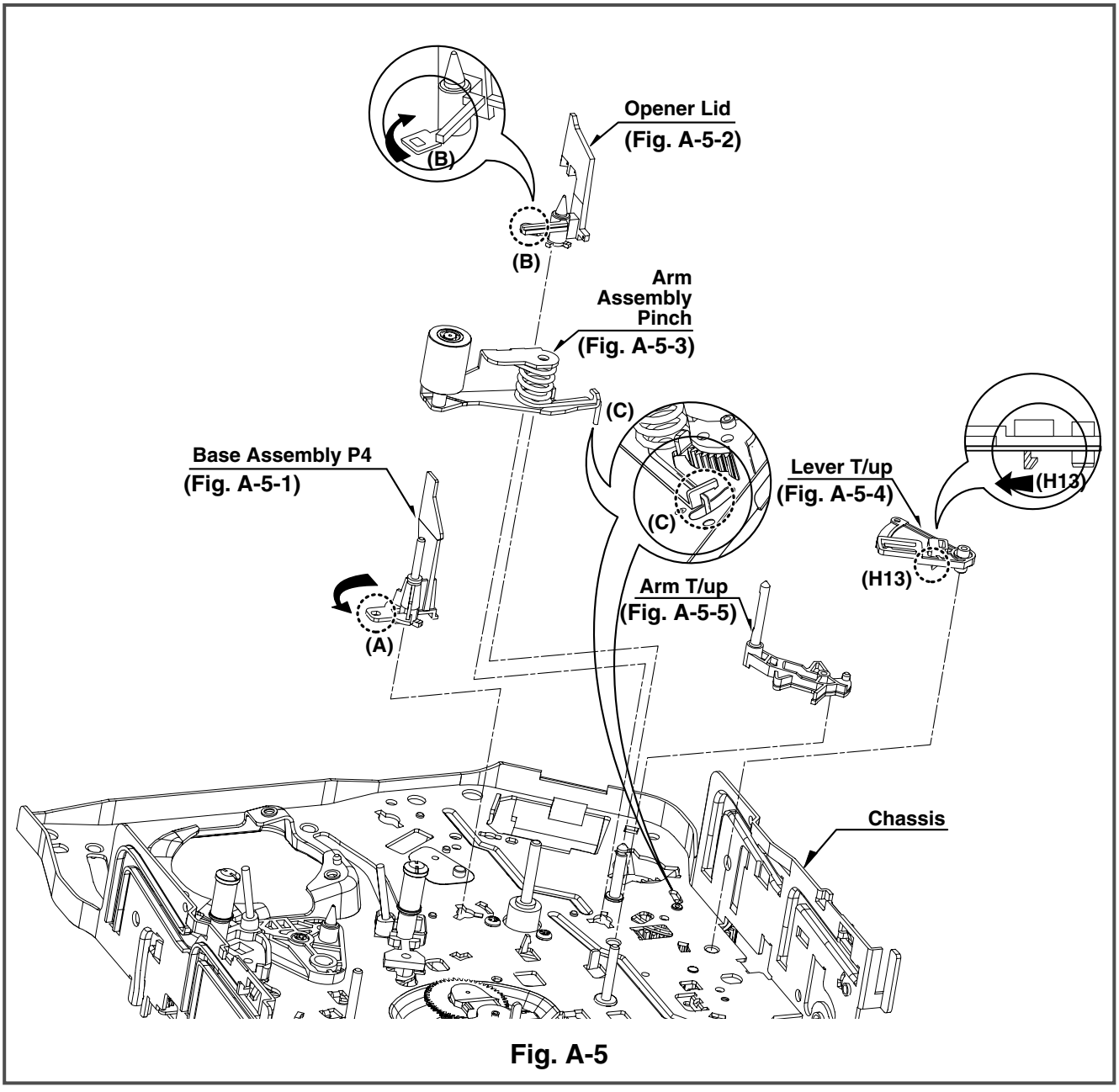


Fig. A-5

16. Base Assembly P4 (Fig. A-5-1)

1) Breakaway the (A) portion of the Base Assembly P4 from the embossing of the Chassis.
2) Turn the Base Assembly P4 to counterclockwise direction and lift it up.

17. Opener Lid (Fig. A-5-2)

1) Breakaway the (B) portion of the Opener Lid from the embossing of the Chassis.
2) Turn the Opener Lid to clockwise direction and lift it up.

18. Arm Assembly Pinch (Fig. A-5-3)

1) Lift the Arm Assembly Pinch up.

NOTE

When reassembling, confirm the (C) portion of the Arm Assembly Pinch is inserted to the Chassis hole correctly as Fig.

19. Lever T/up (Fig. A-5-4)/ Arm T/up (Fig. A-5-5)

1) Unhook the Hook(H13) of the bottom Chassis and lift the Lever T/up up.
2) Lift the Arm T/up up.

DECK MECHANISM DISASSEMBLY

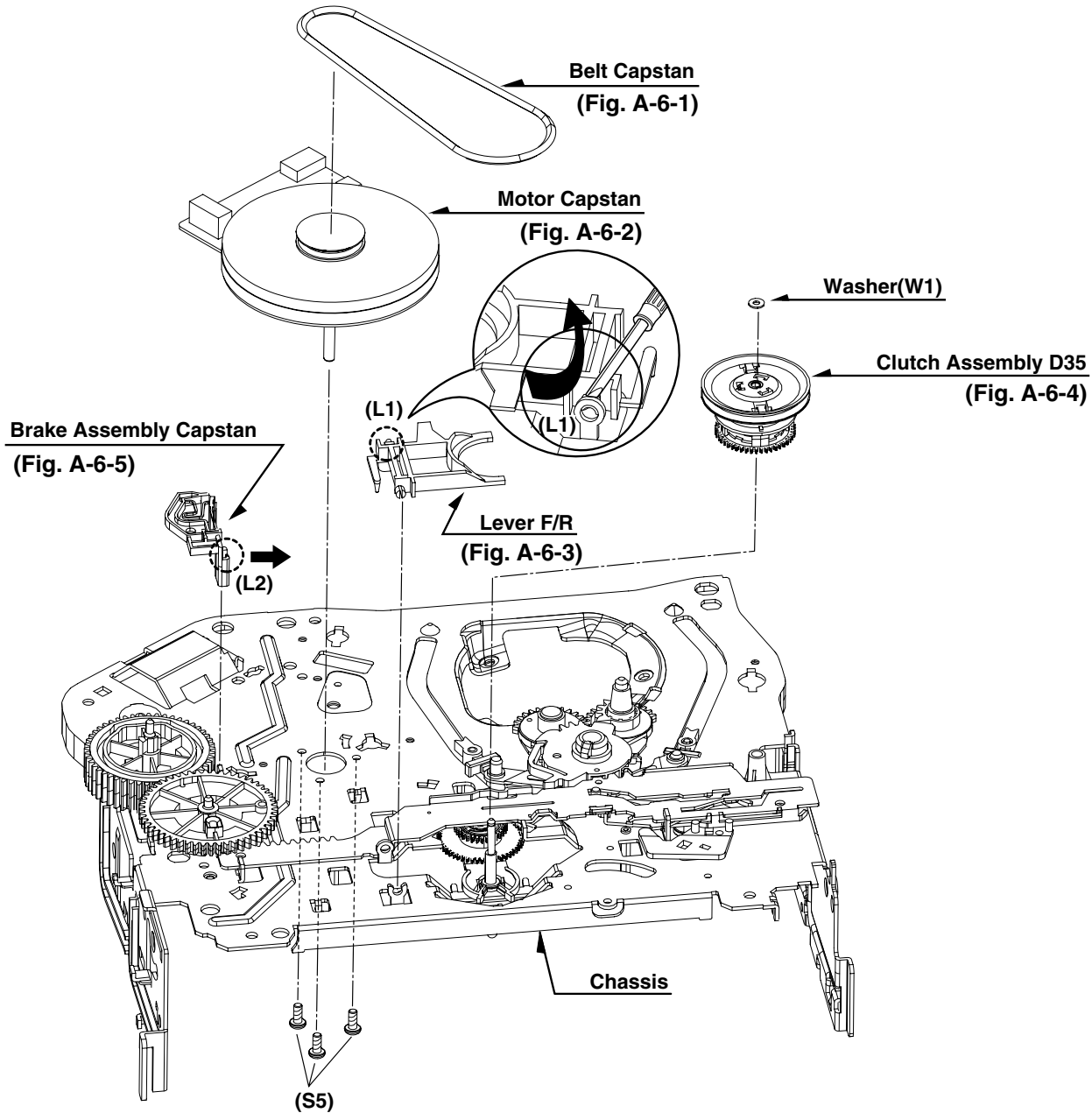


Fig. A-6

20. Belt Capstan (Fig. A-6-1)/ Motor Capstan (Fig. A-6-2)

1) Remove the Belt Capstan.
2) Remove the three Screws(S5) on bottom Chassis and lift the Motor Capstan up.

21. Lever F/R (Fig. A-6-3)

1) Unlock the Locking Tab(L1) as Fig. A-6-3 and lift the Lever F/R up.

22. Clutch Assembly D35 (Fig. A-6-4)

1) Remove the Washer(W1) and lift the Clutch Assembly D35 up.

23. Brake Assembly Capstan (Fig. A-6-5)

1) Pull the Locking Tab(L2) back in direction of arrow and lift it up.

DECK MECHANISM DISASSEMBLY

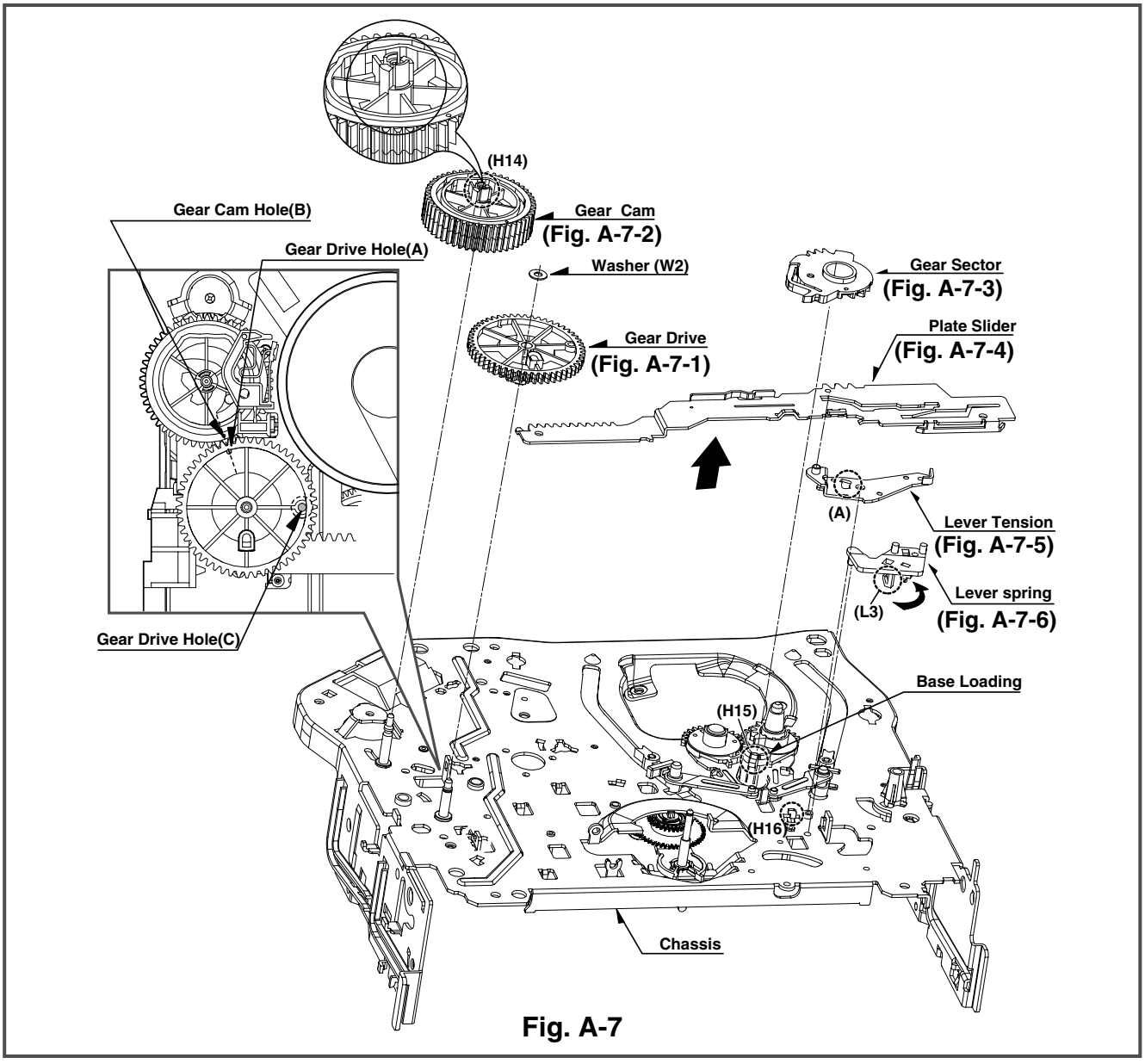


Fig. A-7

24. Gear Drive (Fig. A-7-1)/ Gear Cam (Fig. A-7-2)

1) Remove the Washer(W2) and lift the Gear Drive up.
2) Unhook the Hook(H14) of the Gear Cam and lift the Gear Cam up.

NOTE

When reassembling, align the Gear Drive Hole(A) and the Gear Cam Hole(B) in a straight line after the Gear Drive Hole(C) is aligned with the Chassis Hole as Fig.

25. Gear Sector (Fig. A-7-3)

1) Unhook the Hook(H15) of the Base Loading on bottom Chassis and lift the Gear Sector up.

26. Plate Slider (Fig. A-7-4)

1) Just lift the Plate Slider up.

27. Lever Tension (Fig. A-7-5)

1) Unhook the (A) portion of the Lever Tension from the Hook(H16) of the Chassis.
2) Turn the Lever Tension to counterclockwise direction and lift it up.

28. Lever Spring (Fig. A-7-6)

1) Unlock the Locking Tab(L3) of the bottom Chassis and lift the Lever Spring up.

DECK MECHANISM DISASSEMBLY

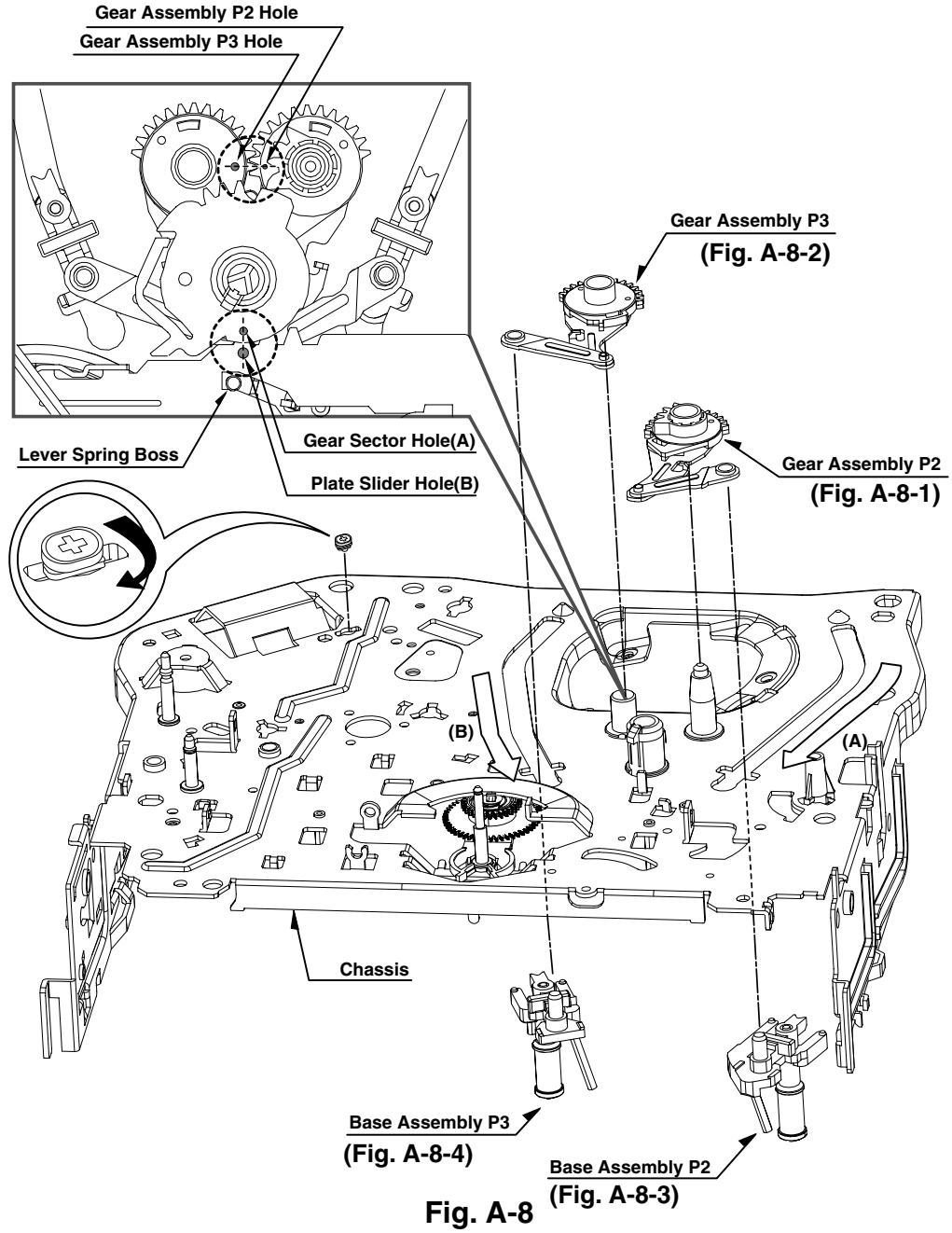


Fig. A-8

29. Gear Assembly P2 (Fig. A-8-1)/ Gear Assembly P3 (Fig. A-8-2)

1) Just lift the Gear Assembly P2 up.
2) Just lift the Gear Assembly P3 up.

NOTE

When reassembling, align the two holes of the Gear Assembly P2 and P3 in a straight line after confirmation whether the Gear Sector Hole(A) and the Plate Slider Hole(B) are aligned or not as Fig.

30. Base Assembly P2 (Fig. A-8-3)/ Base Assembly P3 (Fig. A-8-4)

1) Move the Base Assembly P2 in direction of arrow(A) along the guide hole of the Chassis and disassemble it on bottom side.
2) Move the Base Assembly P3 in direction of arrow(B) along the guide hole of the Chassis and disassemble it on bottom side.

DECK MECHANISM DISASSEMBLY

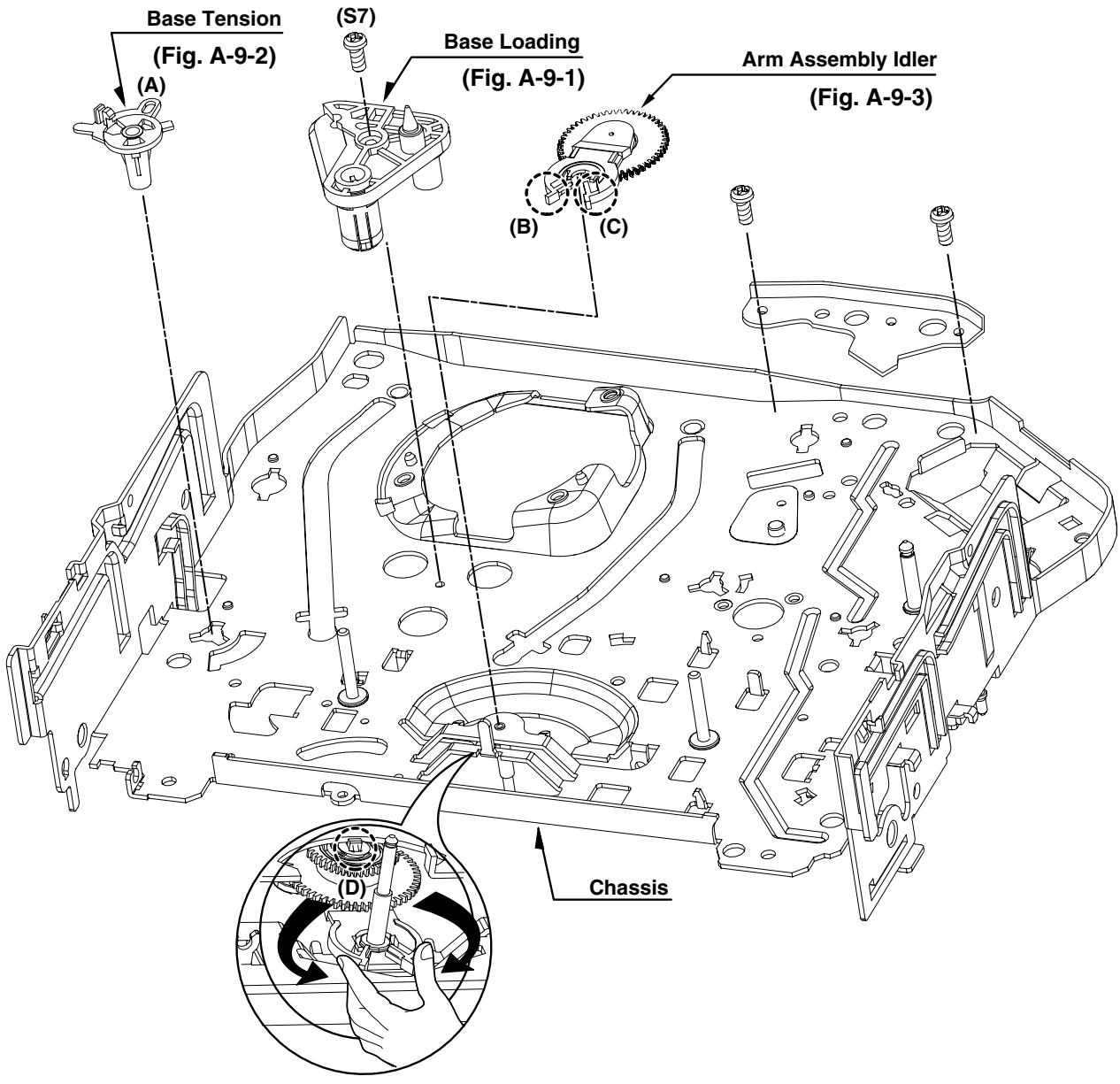


Fig. A-9

31. Base Loading (Fig. A-9-1)

1) Remove the Screw(S7).
2) Lift the Base Loading up.

32. Base Tension (Fig. A-9-2)

1) Breakaway the (A) portion of the Base Tension from the embossing of the Chassis.
2) Turn the Base Tension to counterclockwise direction and lift it up.

33. Arm Assembly Idler (Fig. A-9-3)

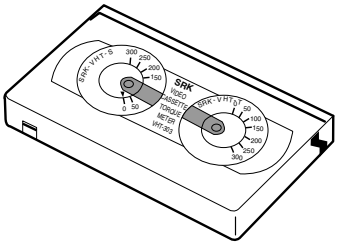
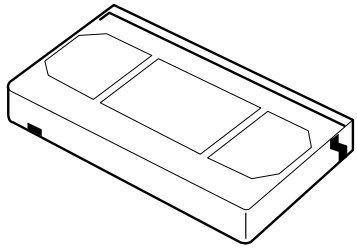
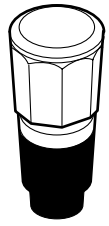
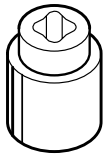
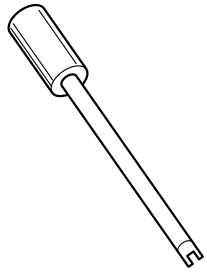
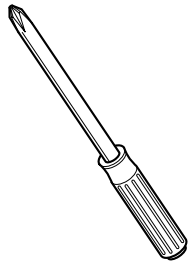
1) Make narrower the two parts, (B) and (C), as Fig. A-9-3.
2) Lift the Arm assembly Idler up.

NOTE

When disassembling, be careful not to be caught the (D) part by the Chassis as Fig.

DECK MECHANISM ADJUSTMENT

• Tools and Fixfures for Service

1. Cassette Torque Meter **SRK-VHT-303(Not SVC part)** **Parts No: D00-D006** 	**2. Alignment Tape** **Parts No NTSC: DTN-001** **PAL:DTN-0002** 	**3. Torque Gauge** **600g.Cm ATG** **Parts No:D00-D002** 
4. Torque Gauge Adaptor **Parts No:D09-R001** 	**5. Post Height Adjusting Driver** **Parts No:DTL-0005** 	**6. + Type Driver (ø 5)** 

DECK MECHANISM ADJUSTMENT

1. Mechanism Alignment Position Check

Purpose:To determine if the Mechanism is in the correct position, when a Tape is ejected.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Check Point
• Blank tape	• Eject Mode (with Cassette ejected)	• Mechanism and Mode Switch Position

1) Turn the Power S/W on and eject the Cassette by pressing the Eject Button.
2) Remove the Top Cover and Plate Assembly Top, visually check if the Gear Cam Hole is aligned with the Chassis Hole as below Fig. C-2.
3) IF not, rotate the Shaft of the Loading Motor to either clockwise or counterclockwise until the alignment is as below Fig. C-2.
4) Remove the Screw which fixes the Deck Mechanism and Main Frame and confirm if the Gear Cam is aligned with the Gear Drive as below Fig. C-1(A).
5) Confirm if the Mode S/W on the Main P.C.Board is aligned as below Fig. C-1(B).
6) Remount the Deck Mechanism on the Main P.C.Board and check each operation.

CHECK DIAGRAM

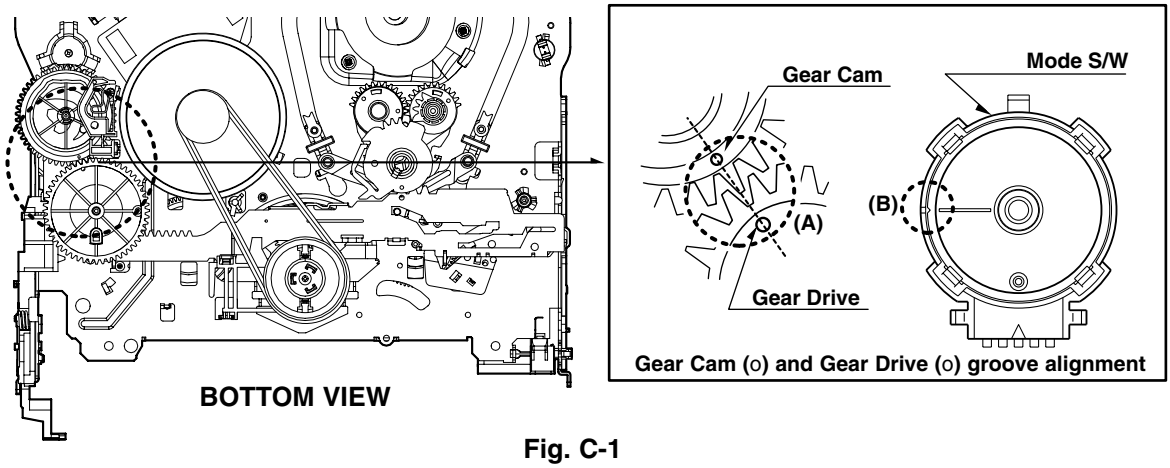


Fig. C-1

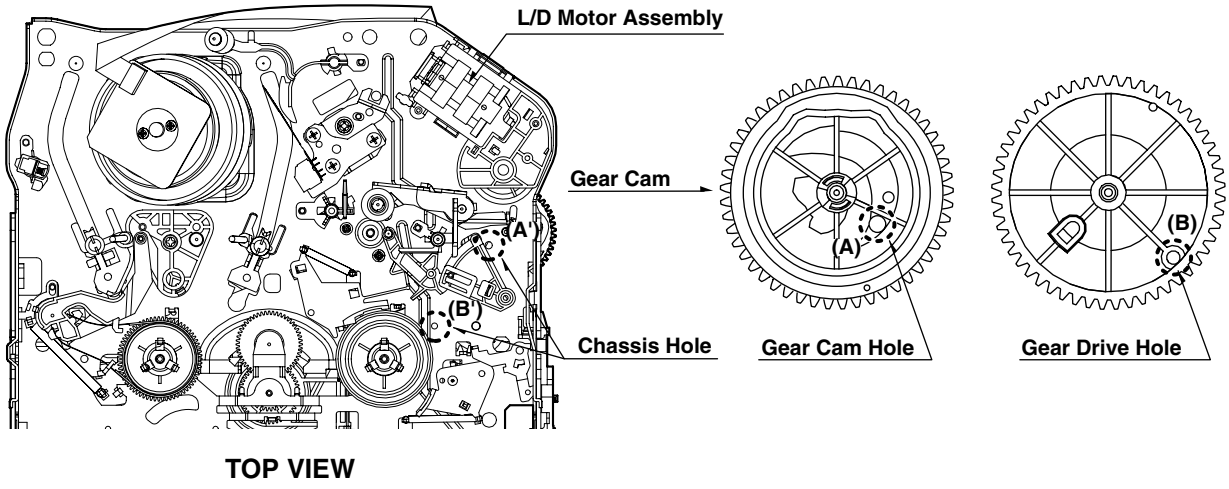


Fig. C-2

DECK MECHANISM ADJUSTMENT

2. Preparation for Adjustment (To set the Deck Mechanism of the loading state without inserting a cassette tape).

1) Unplug the power cord from the AC outlet.
2) Disassemble the Top Cover and Plate Assembly Top.
3) Plug the power cord into the AC outlet.
4) Turn the power S/W on and push the Lever Stopper of the Holder Assembly CST to the back for loading the cassette without tape.
Cover the holes of the End Sensors at the both sides of the Chassis to prevent a light leak.
Then the Deck Mechanism drives to the Stop Mode.
In this case, the Deck Mechanism can accept inputs of each mode, however the Rewind and Review operation can not be performed for more than a few seconds because the Take-up Reel Table is in the Stop State and can not be detected the Reel Pulses.

3. Checking Torque

Purpose: To insure smooth transport of the tape during each mode of operation.
If the tape transport is abnormal, then check the torque as indicated by the chart below.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Checking Method
• Torque Gauge(600g/cm ATG) • Torque Gauge Adaptor • Cassette Torque Meter SRK-VHT-303	• Play (FF) or Review (REW) Mode	• Perform each Deck Mechanism mode without inserting a cassette tape(Refer to above No.2 Preparation for Adjustment). • Read the measurement of the Take-up or Supply Reels on the Cassette Torque Meter(Fig. C-3-2). • Attach the Torque Gauge Adaptor to the Torque Gauge and then read the value of it(Fig. C-3-1).

Item	Mode	Test Equipment	Measurement Reel	Measurement Values
Fast Forward Torque	Fast Forward	Cassette Torque Gauge	Take-Up Reel	More than 400g/cm
Rewind Torque	Rewind	Cassette Torque Gauge	Supply Reel	More than 400g/cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	40~100g/cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	120~210g/cm

NOTE:

The values are measured by using a Torque Gauge and Torque Gauge Adaptor with the Torque Gauge affixed.

NOTE:

The torque reading to measure occurs when the tape abruptly changes direction from Fast Forward to Rewind Mode, when quick braking is applied to both Reels.

• Torque Gauge (600g.cm ATG)

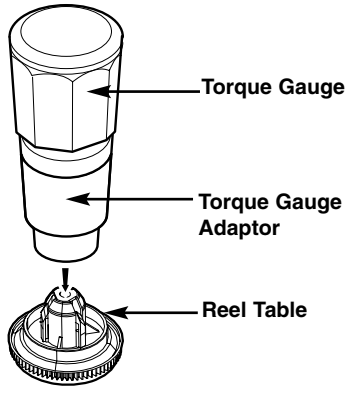


Fig. C-3-1

• Cassette Torque Meter (SRK-VHT-303)

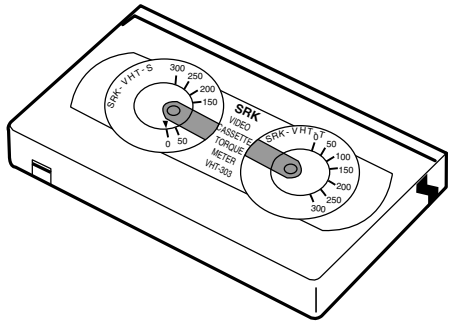


Fig. C-3-2

DECK MECHANISM ADJUSTMENT

4.Guide Roller Height Adjustment

Purpose: To regulate the height of the tape so that the bottom of the tape runs along the tape guide line on the Lower Drum.

4-1. Preliminary Adjustment

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Post Height Adjusting Driver	• Play or Review Mode	• Guide Roller Height Adjustment screws on the Supply and Take-Up Guide Rollers.

Adjustment Procedure

1) Confirm if the tape runs along the tape guide line of the Lower Drum.
2) If the tape runs the bottom of the guide line, turn the Guide Roller Height Adjustment Screw to clockwise direction.
3) If it runs the top, turn to counterclockwise direction.
4) Adjust the height of the Guide Roller to be guided to the guide line of the Lower Drum from the starting and ending point of the Drum.

ADJUSTMENT DIAGRAM

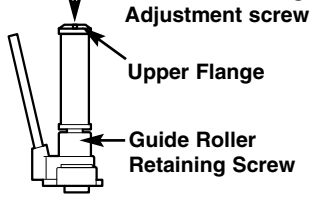


Fig. C-4-1

4-2. Precise Adjustment

Test Equipment/Fixture	Test Equipment Connection Points	Test Conditions VCR(VCP) State	Adjustment Point
• Oscilloscope • Alignment Tape • Post Height Adjusting Driver	• CH-1:PB RF Envelope • CH-2:NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Point • RF Envelope Output Point	• Play an Alignment Tape	• Guide Roller Height Adjustment Screws

Adjustment Procedure

1) Play an Alignment Tape after connecting the probe of the Oscilloscope to the RF Envelope Output Test Point and Head Switching Output Test Point.
2) Tracking Control(in PB Mode) : Center Position(When this adjustment is performed after the Drum Assembly has been replaced, set the Tracking Control so that the RF Output is Maximum).
3) Height Adjustment Screw : Flatten the RF waveform. (Fig. C-4-2)
4) Turn(Move) the Tracking Control(in PB Mode) clockwise and counterclockwise.(Fig. C-4-3)
5) Check that any drop of RF Output is uniform at the start and end of the waveform.

NOTE

If the adjustment is excessive or insufficient the tape will jam or fold.

Waveform Diagrams

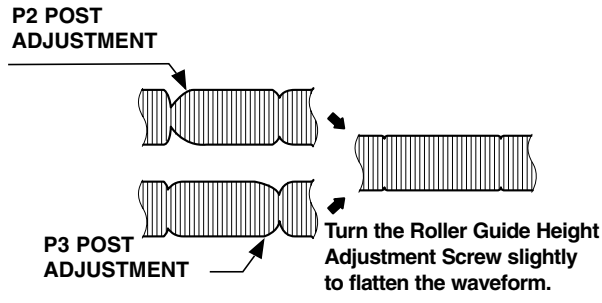


Fig. C-4-2

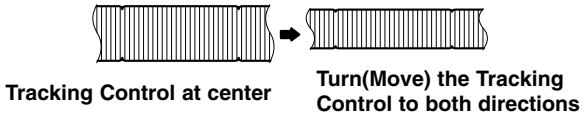
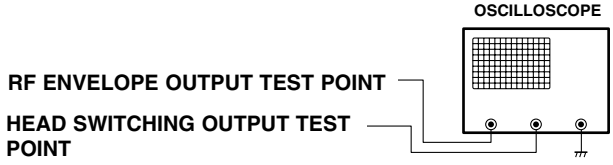


Fig. C-4-3

Connection Diagram



DECK MECHANISM ADJUSTMENT

5. Audio/Control (A/C) Head Adjustment

Purpose: To insure that the tape passes accurately over the Audio and Control Tracks in exact alignment of the both Record and Playback Modes.

5-1. Preliminary Adjustment (Height and Tilt Adjustment)
Perform the Preliminary Adjustment, when there is no Audio Output Signal with the Alignment Tape.

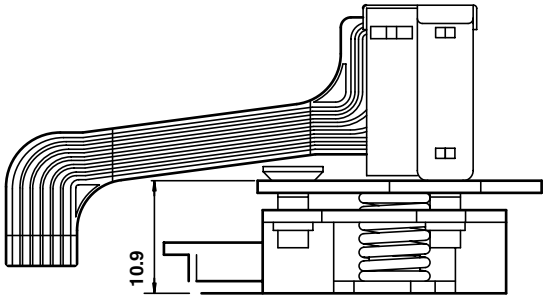
Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Blank Tape • Screw Driver(+) Type 5mm	• Play the blank tape	• Tilt Adjustment Screw(C) • Height Adjustment Screw(B) • Azimuth Adjustment Screw(A)

Adjustment Procedure/Diagrams

1) Initially adjust the Base Assembly A/C Head as shown Fig. C-5-1 by using the Height Adjustment Screw(B).
2) Play a blank tape and observe if the tape passes accurately over the A/C Head without tape curling or folding.
3) If folding or curling is occured then adjust the Tilt Adjustment Screw(C) while the tape is running to resemble Fig. C-5-3.
4) Reconfirm the tape path after Playback about 4~5 seconds.

NOTE

Ideal A/C head height occurs when the tape runs between 0.2~0.25mm above the bottom edge of the A/C Head core.



A/C Head Base

Fig. C-5-1

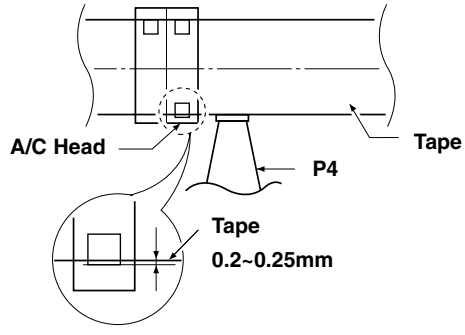
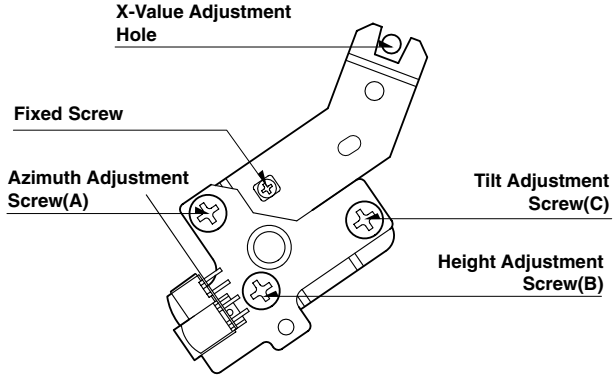


Fig. C-5-3



A/C Head Assembly

Fig. C-5-2

5-2. Confirm that the tape passes smoothly between the Take-up Guide and Pinch Roller(using a mirror or the naked eye).

1) After completing Step 5-1.(Preliminary Adjustment), check that the tape passes around the Take-up Guide and Pinch Roller without folding or curling at the top or bottom.
   (1) If folding or curling is observed at the bottom of the Take-up Guide then slowly turn the Tilt Adjustment Screw(C) in the clockwise direction.
   (2) If folding or curling is observed at the top of it then slowly turn the Tilt Adjustment Screw(C) in the counterclockwise direction.

NOTE:

Check the RF envelope after adjusting the A/C Head, if the RF waveform differs from Fig. C-5-4, performs Precise Adjustment to flat the RF waveform.

5-3. Precise Adjustment (Azimuth adjustment)

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment Tape(SP) • Screw Driver(+) Type 5mm	• Audio output jack	• Play an Alignment Tape 1KHz, 7KHz Sections	• Azimuth Adjustment Screw(A) • Height Adjustment Screw(B)

Adjustment Procedure

1) Connect the probe of the oscilloscope to Audio Output Jack.
2) Alternately adjust the Azimuth Adjustment Screw(A) and the Tilt Adjustment Screw(C) for maximum output of the 1KHz and 7KHz segments, while maintaining the flattest envelope differential between the two frequencies.

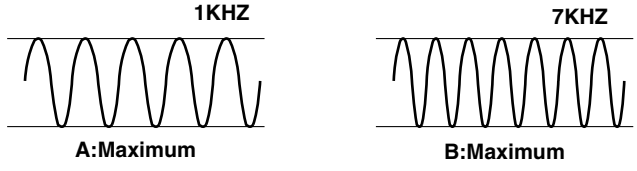
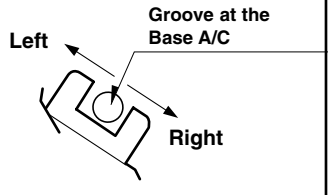


Fig. C-5-4

6. X-Value Adjustment

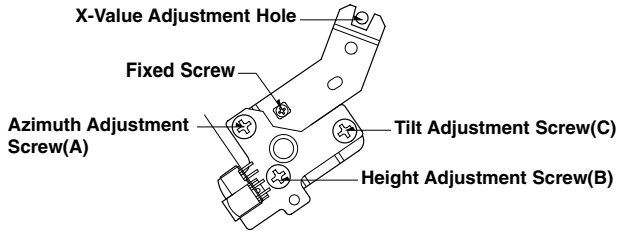
Purpose: To obtain compatibility with the other VCR(VCP) Models.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment Tape(SP only) • Screw Driver(+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play an Alignment Tape	

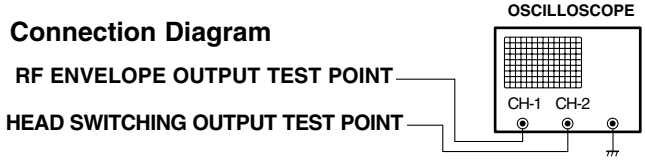
Adjustment Procedure

1) Release the Automatic Tracking to run long enough for tracking to complete it's cycle.
2) Loosen the Fixed Mounting Screw and move the Base Assembly A/C Head in the direction as shown in the diagram to find the center of the peak that allows for the maximum waveform envelope.
   This method should allow the 31µm Head to be centrally located over the 58µm tape track.
3) Tighten the Base Assembly A/C Head mounting Screw.

Adjustment Diagram



Connection Diagram



DECK MECHANISM ADJUSTMENT

7. Adjustment after Replacing Drum Assembly (Video Heads)

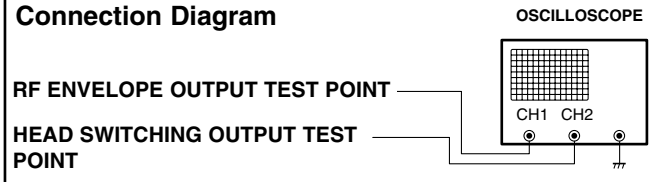
Purpose: To correct for shift in the Roller Guide and X value after replacing the Drum.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Points
• Oscilloscope • Alignment Tapes • Blank Tape • Post Height Adjusting Driver • Screw Driver(+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play the Blank Tape • Play an Alignment Tape	• Guide Roller Precise Adjustment • Switching Point • Tracking Preset • X-Value

Checking/Adjustment Procedure

Play a blank tape and check for tape curling or creasing around the Roller Guide. If there is a problem then follow the procedure 4. "Guide Roller Height" and 5. "Audio Control(A/C) Head Adjustment".

Connection Diagram



Waveform

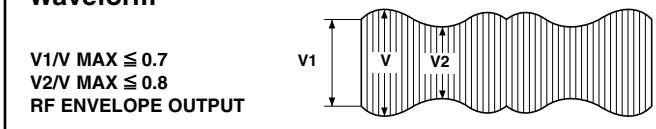


Fig. C-7

8. Check the Tape Travel after Reassembling Deck Assembly.

8-1. Checking Audio and RF Locking Time during playback and after CUE or REV (FF/REW)

Test Equipment/ Fixture	Specification	Connection Points	Test Conditions (Mechanism Condition)
• Oscilloscope • Alignment Tapes(with 6H 3KHz Color Bar Signal) • Stop Watch	• RF Locking Time: Less than 5 sec. • Audio Locking Time:Less than 10sec	• CH-1: PB RF Envelope • CH-2: Audio Output • RF Envelope Output Point • Audio Output Jack	• Play an Alignment Tape (with 6H 3kHz Color Bar Signal)

Checking Procedure

Play an Alignment Tape then change the operating mode to CUE or REV and confirm if the unit meets the above listed specifications.

NOTES:

1) CUE is the forward search mode
2) REV is the backward search mode
3) Refer to the Play mede

8-2. Checking for tape curling or jamming

Test Equipment/ Fixture	Specification	Test Conditions (Mechanism Condition)
• T-160 Tape • T-120 Tape	• Be sure there is no tape jamming or curling at the begining, middle or end of the tape.	• Run the CUE, REV, Play mode at the beginning and the end of the tape.

Checking Procedure

1) Confirm that the tape runs smoothly around the roller guides, Drum and A/C Head Assemblies while abruptly changing operating modes from Play to CUE or REV. This is to be checked at the begining, middle and end sections of the tape.
2) Confirm that the tape passes over the A/C Head Assembly as indicated by proper audio reproduction and proper tape counter performance.

1. Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit.
Check with the customer to find out how often the unit is used, and then determine that the unit is ready for inspection and maintenance. Check the following parts.

Phenomenon	Inspection	Replacement	
Color beats	Dirt on Full-Erase Head	o	F/E Head
Poor S/N, no color	Dirt on Video Head	o	Video Head
Vertical or Horizontal jitter	Dirt on Video Head Dirt on tape transport system	o	
Low volume, Sound distorted	Dirt on Audio/Control Head	o	A/C Head
Tape does not run. Tape is slack	Dirt on Pinch Roller	o	Pinch Roller Belt Capston
In Review and Unloading (off mode), the tape is rolled up loosely.	Clutch Assembly D35 torque reduced	o	Clutch Assembly D35
	Cleaning Drum and transport system	Fig. C-9-3	

NOTE

If locations marked with **o** do not operate normally after cleaning, check for wear and replace.
See the EXPLODED VIEWS at the end of this manual as well as the above illustrations and see the Greasing (Page 4-21, 22) for the sections to be lubricated and greased.

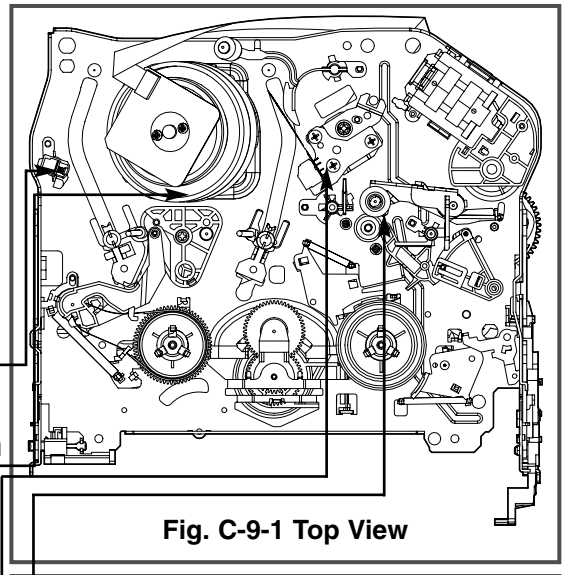


Fig. C-9-1 Top View

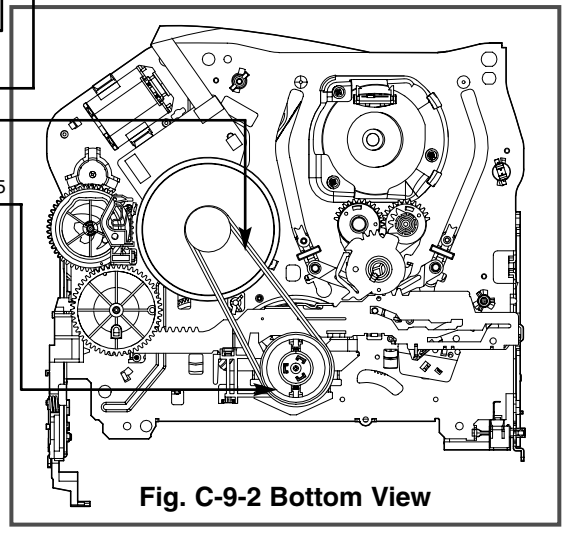


Fig. C-9-2 Bottom View

*** No. (1)~(12) Indicates the Tape Path to be traveled from Supply Reel to Take-up Reel.**

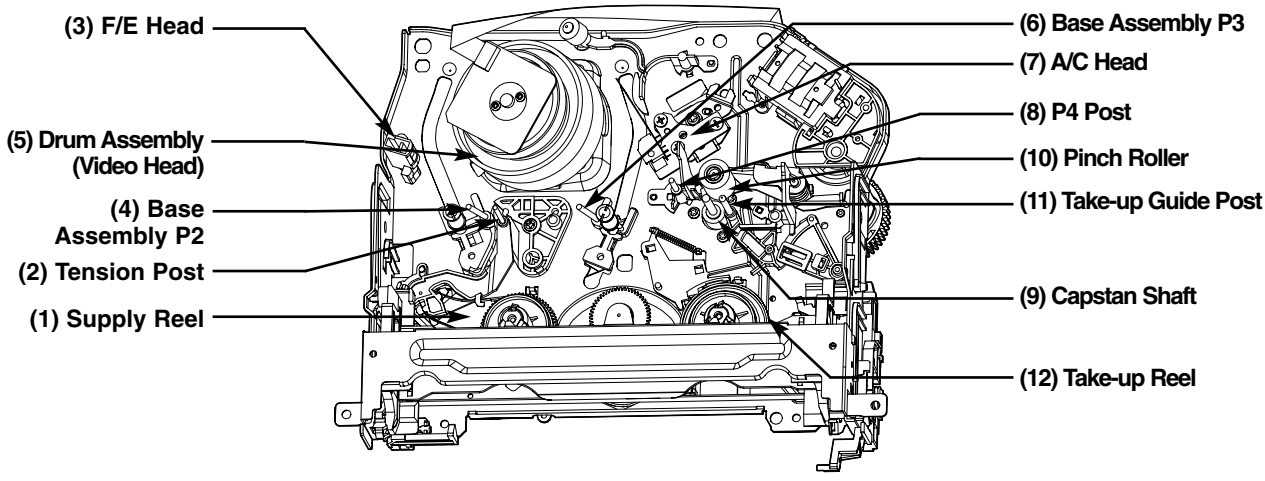


Fig. C-9-3 Tape Transport System

2. Required Maintenance

The recording density of a VCR(VCP) is much higher than that of an audio tape recorder. VCR(VCP) components must be very precise, at tolerances of 1/1000mm, to ensure compatibility with the other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure a good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, is necessary.

3. Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR(VCP), and the environment in which the VCR(VCP) is used.
But, in general home use, a good picture will be maintained if inspection and maintenance is made every 1,000 hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary / Average hours used per day	About 1 year	About 18 months	About 3 years
One hour	■	■	■
Two hours	■	■	
Three hours	■		

4. Supplies Required for Inspection and Maintence

(1) Grease : Kanto G-311G (Blue) or equivalent
(2) Isopropyl Alcohol or equivalent
(3) Cleaning Patches
(4) Grease : Kanto G-381(Yellow)

5. Maintenance Procedure

5-1) Cleaning

(1) Cleaning video head
First use a cleaning tape. If the dirt on the head is too stubborn to remove by tape, use the cleaning patch. Coat the cleaning patch with Isopropyl Alcohol. Touch the cleaning patch to the head tip and gently turn the head(rotating cylinder) right and left.
(Do not move the cleaning patch vertically. Make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged.)
Thoroughly dry the head. Then run the test tape. If Isopropyl Alcohol remains on the video head, the tape may be damaged when it comes into contact with the head surface.
(2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with Isopropyl Alcohol.

NOTES:

① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which moves the tape.
② Make sure that during cleaning you do not touch the tape transport system with excessive force that would cause deformation or damage to the system.

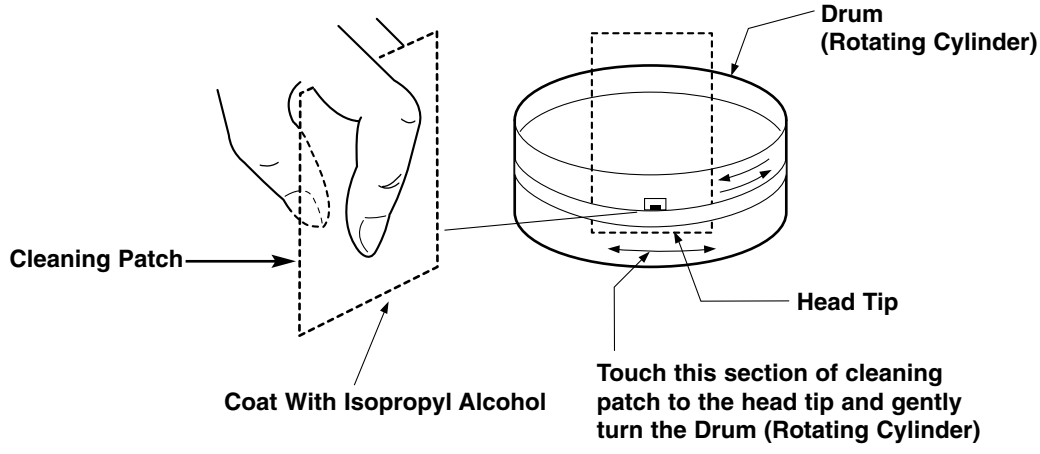

Drum
(Rotating Cylinder)
Cleaning Patch
Head Tip
Coat With Isopropyl Alcohol
Touch this section of cleaning patch to the head tip and gently turn the Drum (Rotating Cylinder)

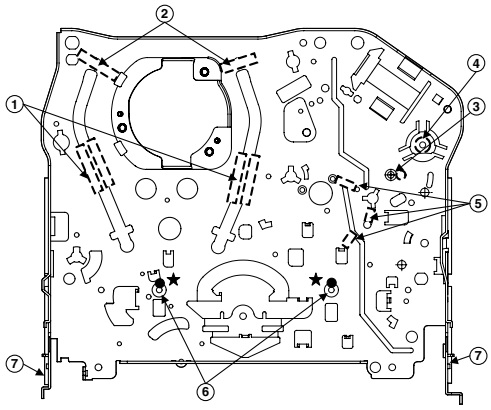
Fig. C-9-4

5-2) Greasing

(1) Greasing guidelines
Apply grease, with a cleaning patch. Do not use excessive grease. It may come into contact with the tape transport or drive system. Wipe excessive grease and clean with cleaning patch wetted in Isopropyl Alcohol.

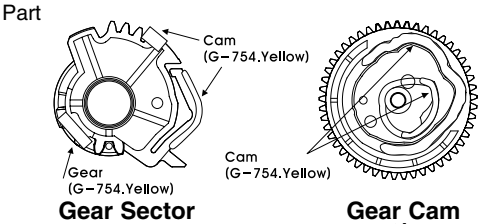
NOTE:Greasing Points

1) Loading Path Inside & Top side
2) Base Assembly P2, P3 stopper
3) Shaft
4) L/D Motor Gear Wheel Part
5) Arm Take-up Rubbing Sections
6)Reel S,T shaft(G381:Yellow)
7) Arm Assembly F/L Rotating Sections

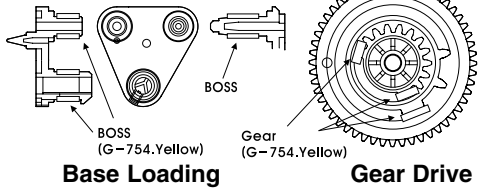


Chassis (Top)

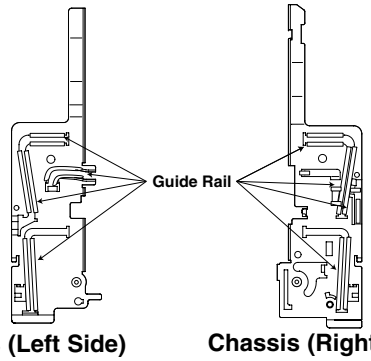
Gear Part



Gear Sector **Gear Cam**



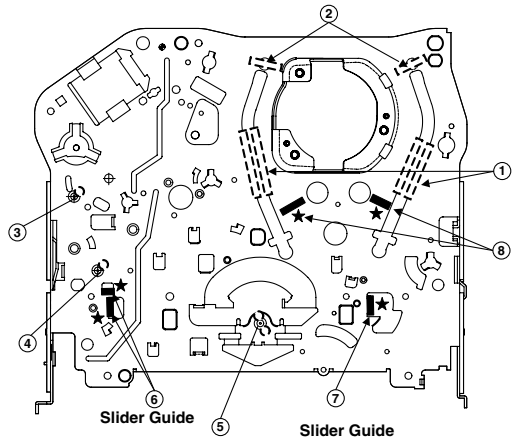
Base Loading **Gear Drive**



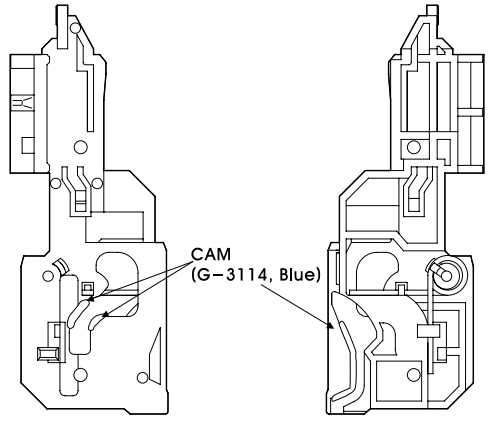
Chassis (Left Side) **Chassis (Right Side)**

(2) Periodic greasing
Grease specified locations every 5,000 hours.

1) Loading Path Inside & Top side
2) Base Assembly P2,P3 stopper
3) Shaft
4) Shaft
5) Clutch Assembly D35 Shaft
6) Plate Slider Guide Sections
7) Plate Slider Guide Sections
8) Gear Assembly P2, P2 Rubbing Sections



Chassis (Bottom)



Gear Rack F/L

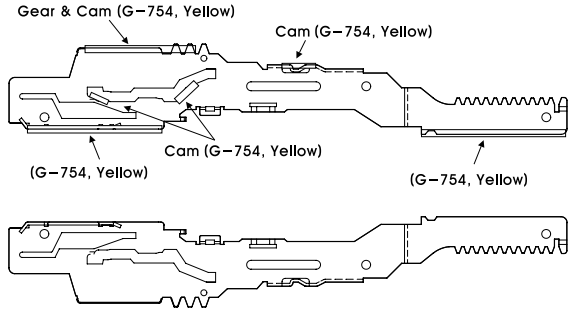
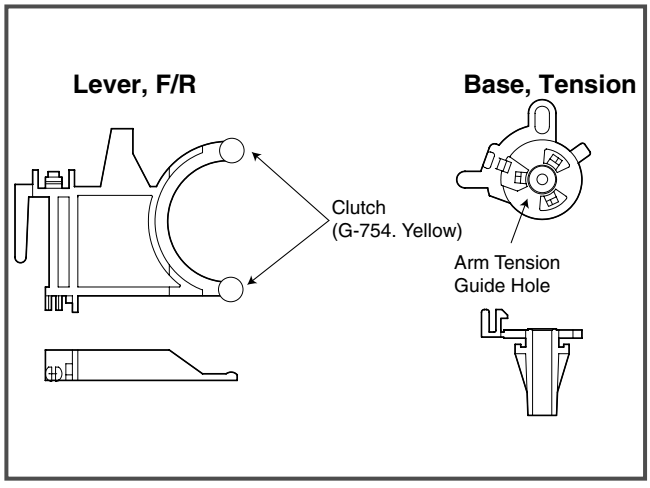
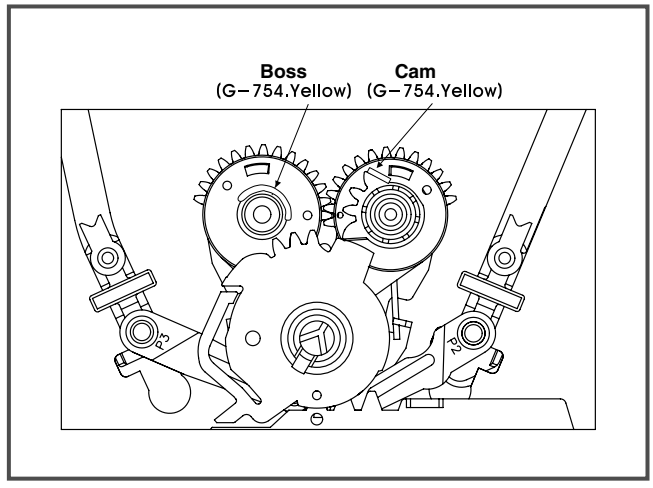


Plate Slider

Lever, F/R, Base, Tension



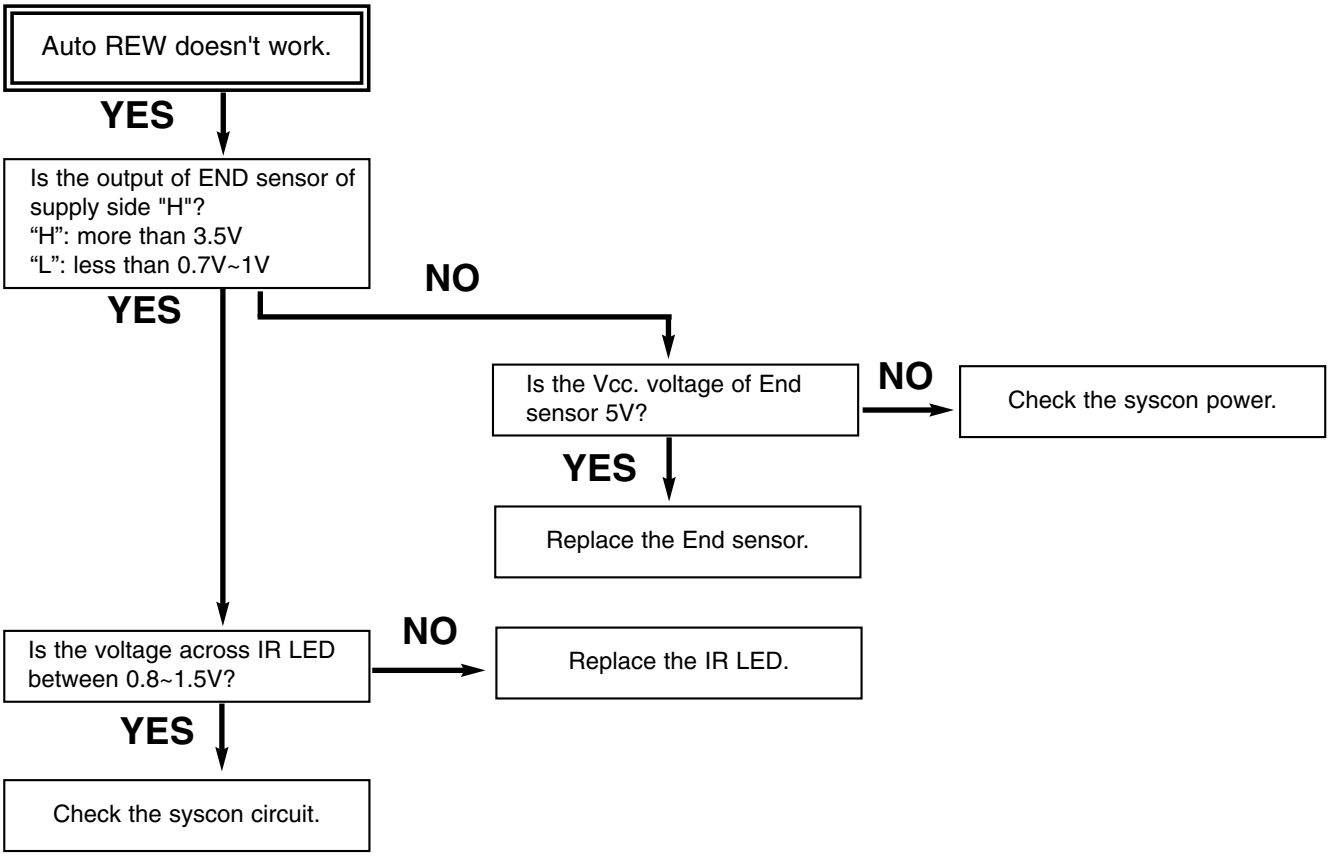
GEAR AY, P2 & P3



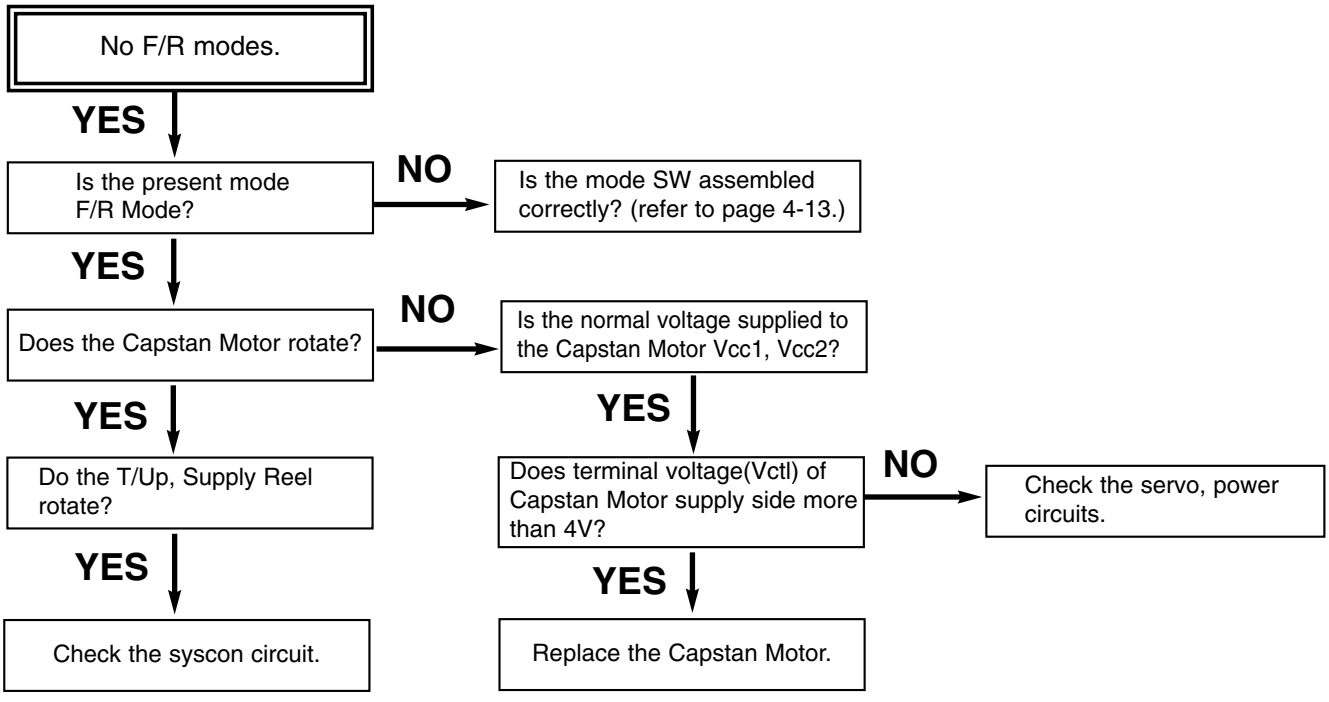
MECHANISM TROUBLESHOOTING GUIDE

1.Deck Mechanism

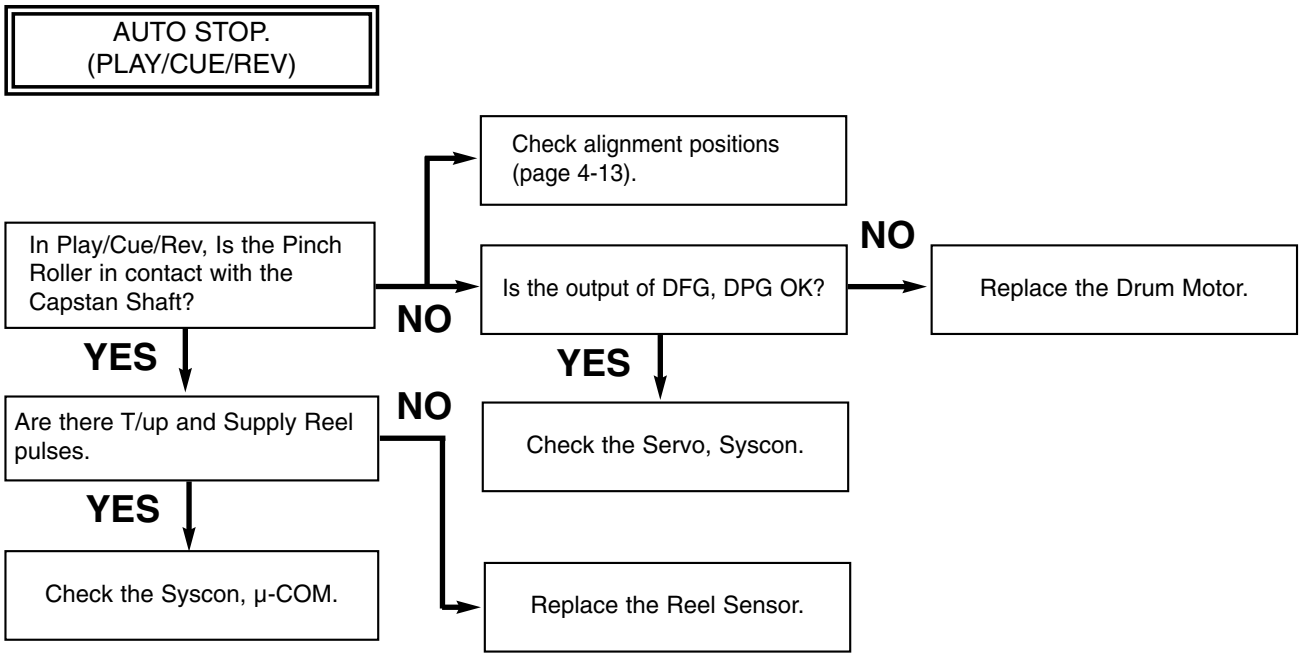
A.



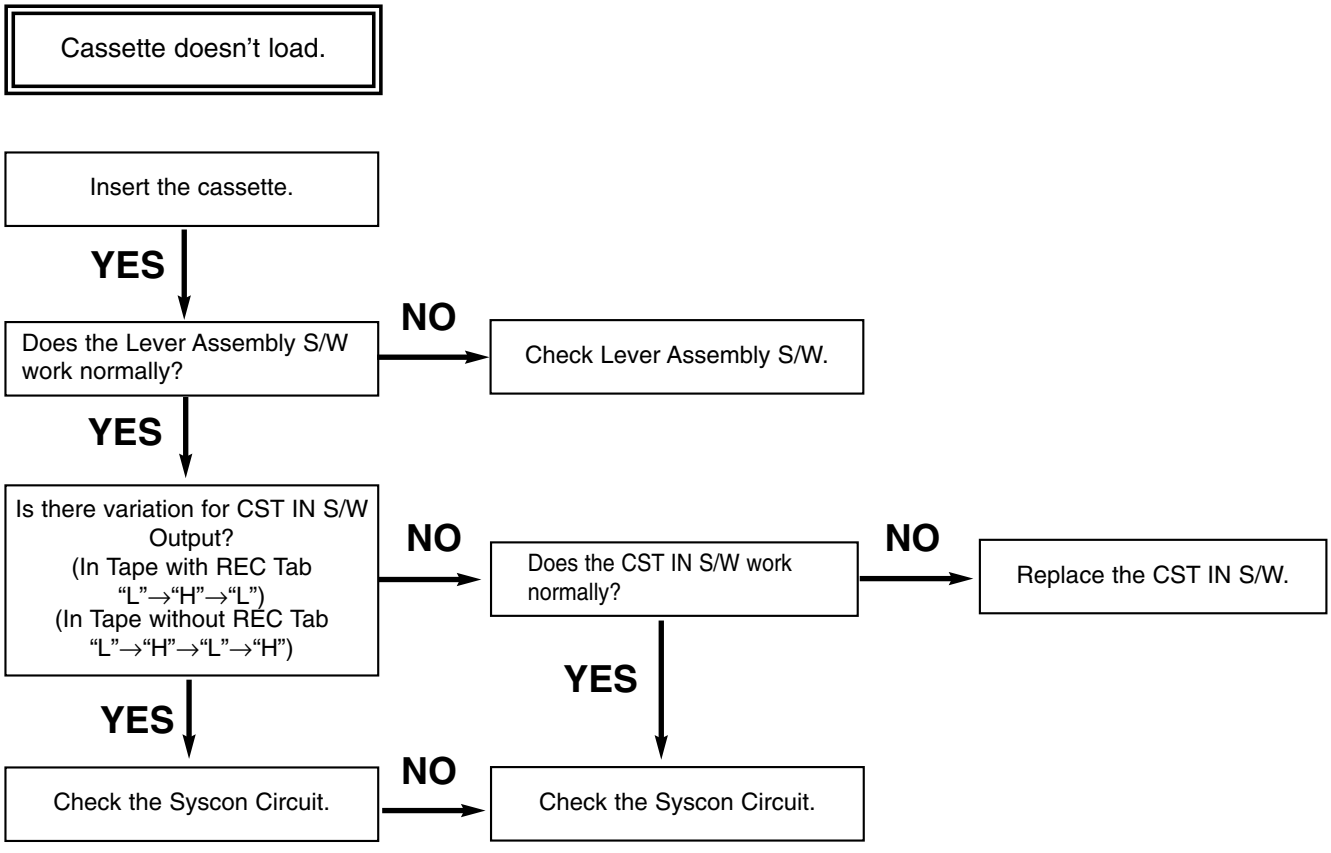
B.



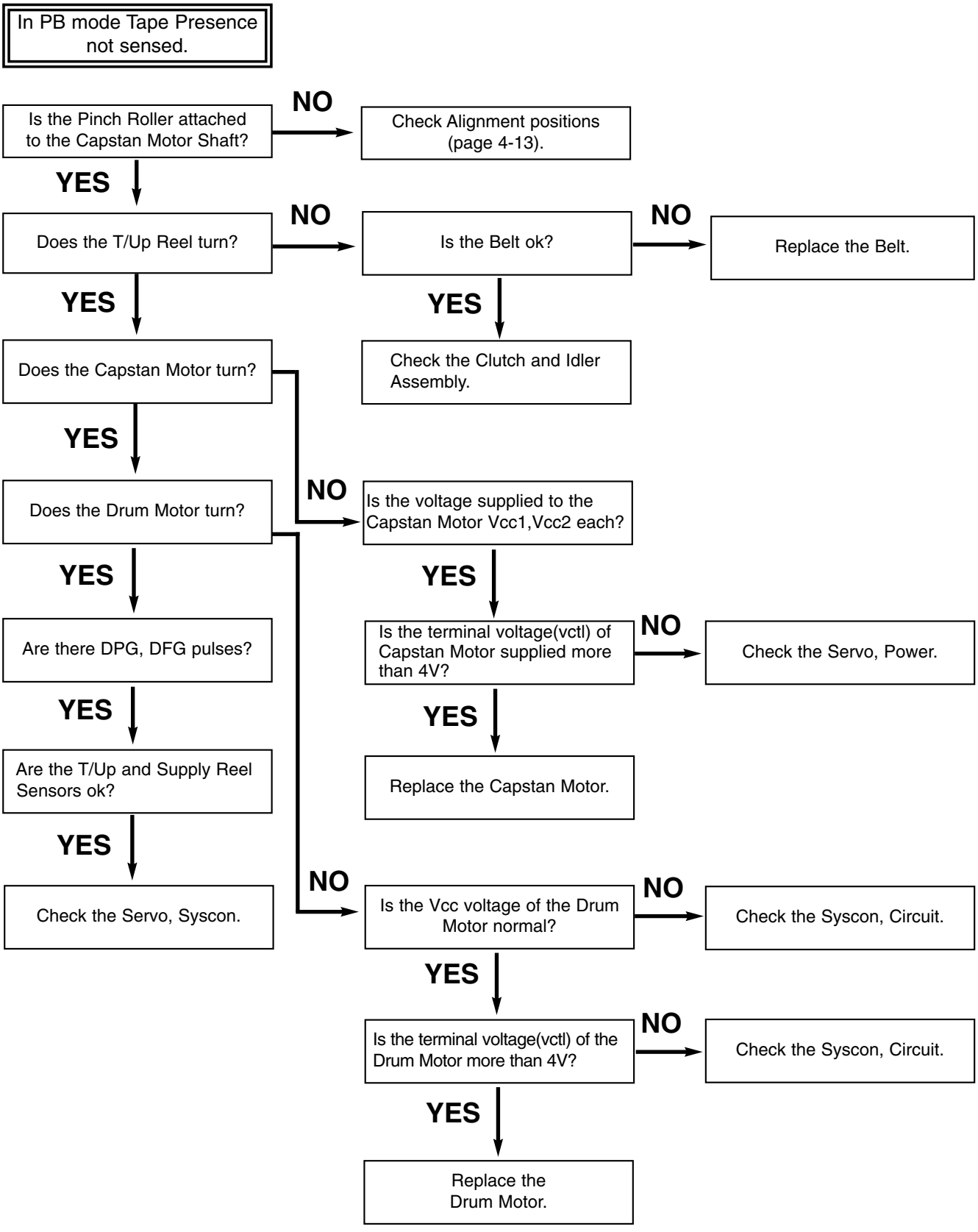
C.


AUTO STOP.
(PLAY/CUE/REV)
In Play/Cue/Rev, Is the Pinch Roller in contact with the Capstan Shaft?
NO
Check alignment positions (page 4-13).
Is the output of DFG, DPG OK?
NO
Replace the Drum Motor.
YES
YES
Are there T/up and Supply Reel pulses.
NO
Check the Servo, Syscon.
YES
Check the Syscon, µ-COM.
Replace the Reel Sensor.

D.

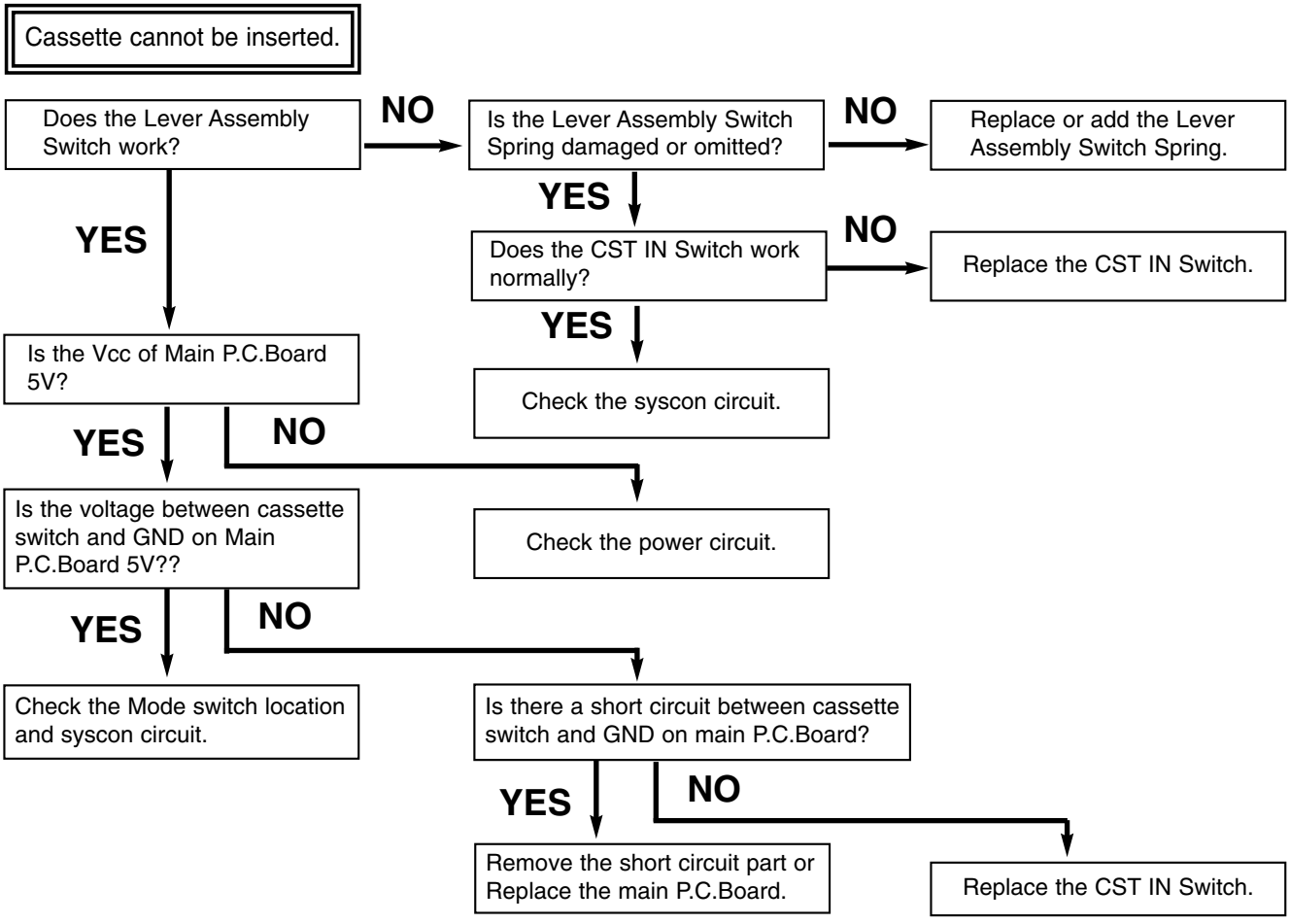

Cassette doesn't load.
Insert the cassette.
YES
Does the Lever Assembly S/W work normally?
NO
Check Lever Assembly S/W.
YES
Is there variation for CST IN S/W Output?
(In Tape with REC Tab
"L"→"H"→"L")
(In Tape without REC Tab
"L"→"H"→"L"→"H")
NO
Does the CST IN S/W work normally?
NO
Replace the CST IN S/W.
YES
YES
Check the Syscon Circuit.
NO
Check the Syscon Circuit.

E.

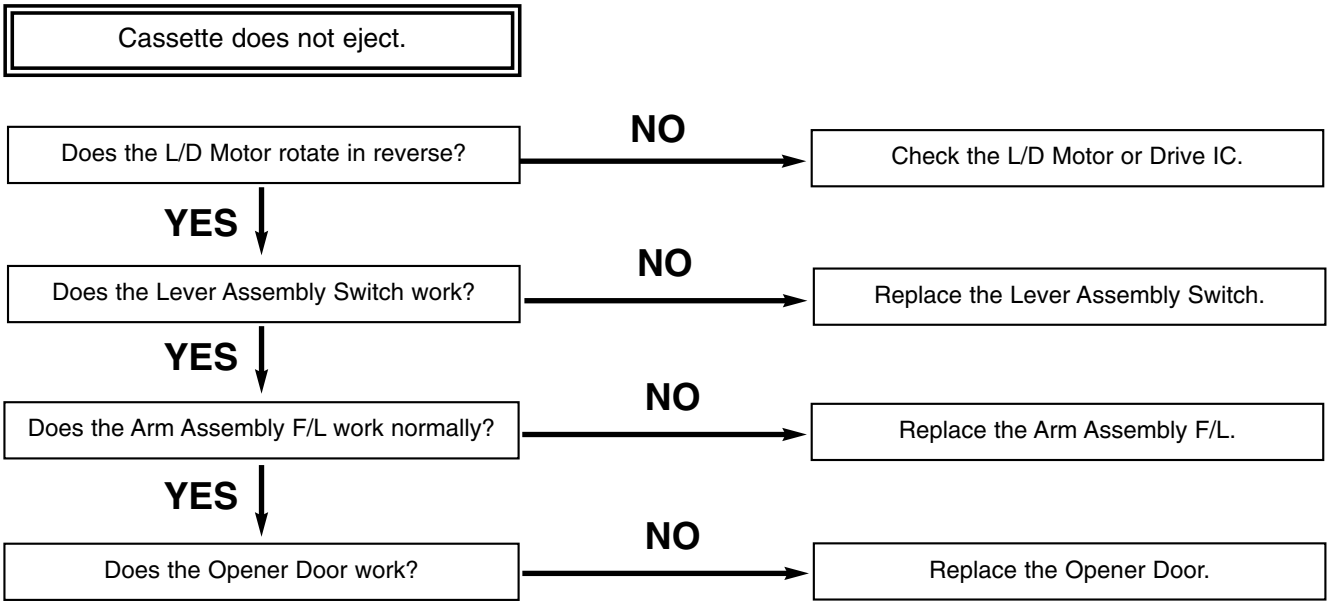

In PB mode Tape Presence not sensed.
Is the Pinch Roller attached to the Capstan Motor Shaft?
NO
Check Alignment positions (page 4-13).
YES
Does the T/Up Reel turn?
NO
Is the Belt ok?
NO
Replace the Belt.
YES
YES
Check the Clutch and Idler Assembly.
Does the Capstan Motor turn?
YES
Does the Drum Motor turn?
NO
Is the voltage supplied to the Capstan Motor Vcc1,Vcc2 each?
YES
YES
Are there DPG, DFG pulses?
Is the terminal voltage(vctl) of Capstan Motor supplied more than 4V?
NO
Check the Servo, Power.
YES
YES
Are the T/Up and Supply Reel Sensors ok?
Replace the Capstan Motor.
YES
NO
Check the Servo, Syscon.
Is the Vcc voltage of the Drum Motor normal?
NO
Check the Syscon, Circuit.
YES
Is the terminal voltage(vctl) of the Drum Motor more than 4V?
NO
Check the Syscon, Circuit.
YES
Replace the Drum Motor.

2. Front Loading Mechanism

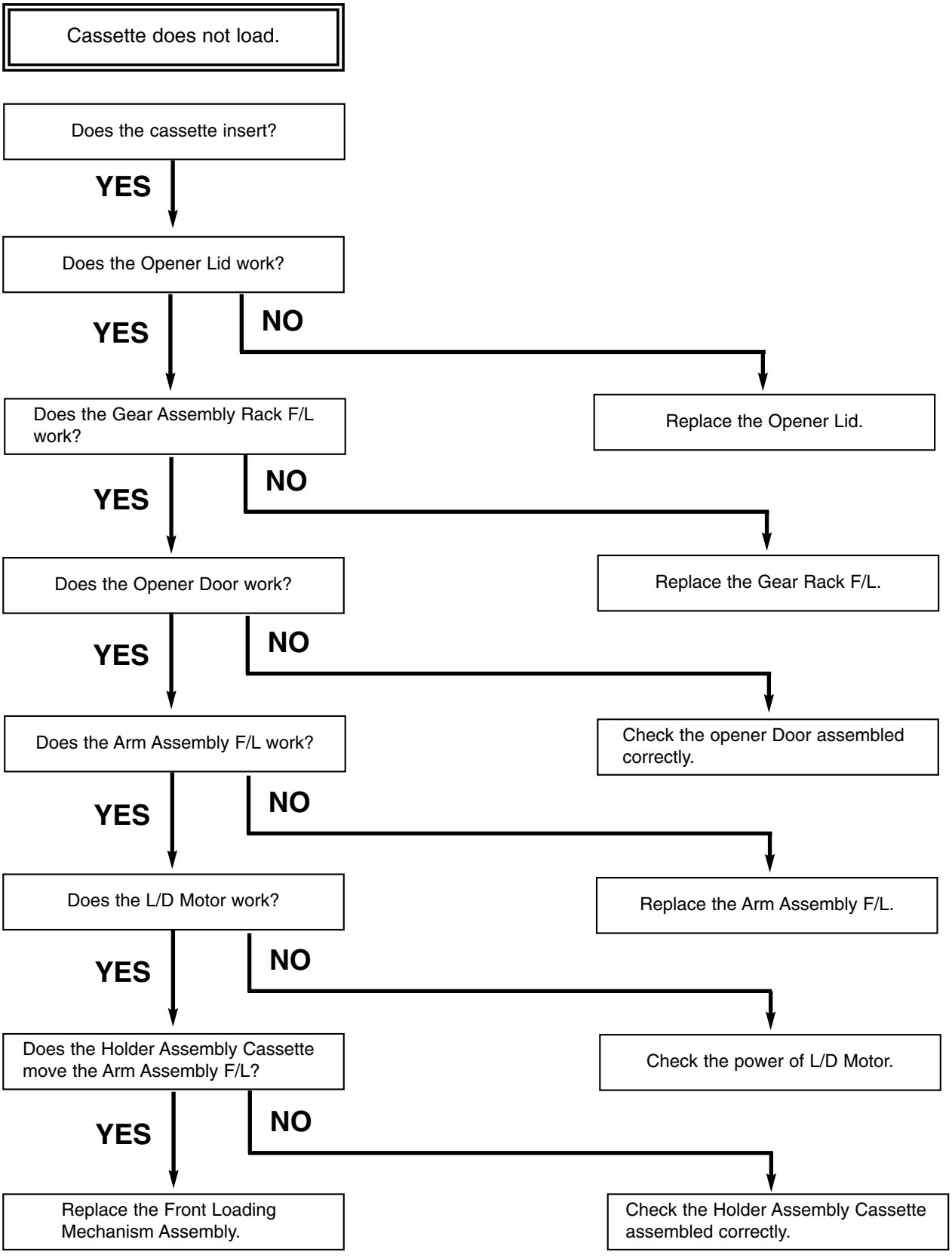
A.


Cassette cannot be inserted.
Does the Lever Assembly Switch work?
NO
Is the Lever Assembly Switch Spring damaged or omitted?
NO
Replace or add the Lever Assembly Switch Spring.
YES
YES
Does the CST IN Switch work normally?
NO
Replace the CST IN Switch.
YES
Is the Vcc of Main P.C.Board 5V?
Check the syscon circuit.
YES
NO
Is the voltage between cassette switch and GND on Main P.C.Board 5V??
Check the power circuit.
YES
NO
Check the Mode switch location and syscon circuit.
Is there a short circuit between cassette switch and GND on main P.C.Board?
YES
NO
Remove the short circuit part or Replace the main P.C.Board.
Replace the CST IN Switch.

B.

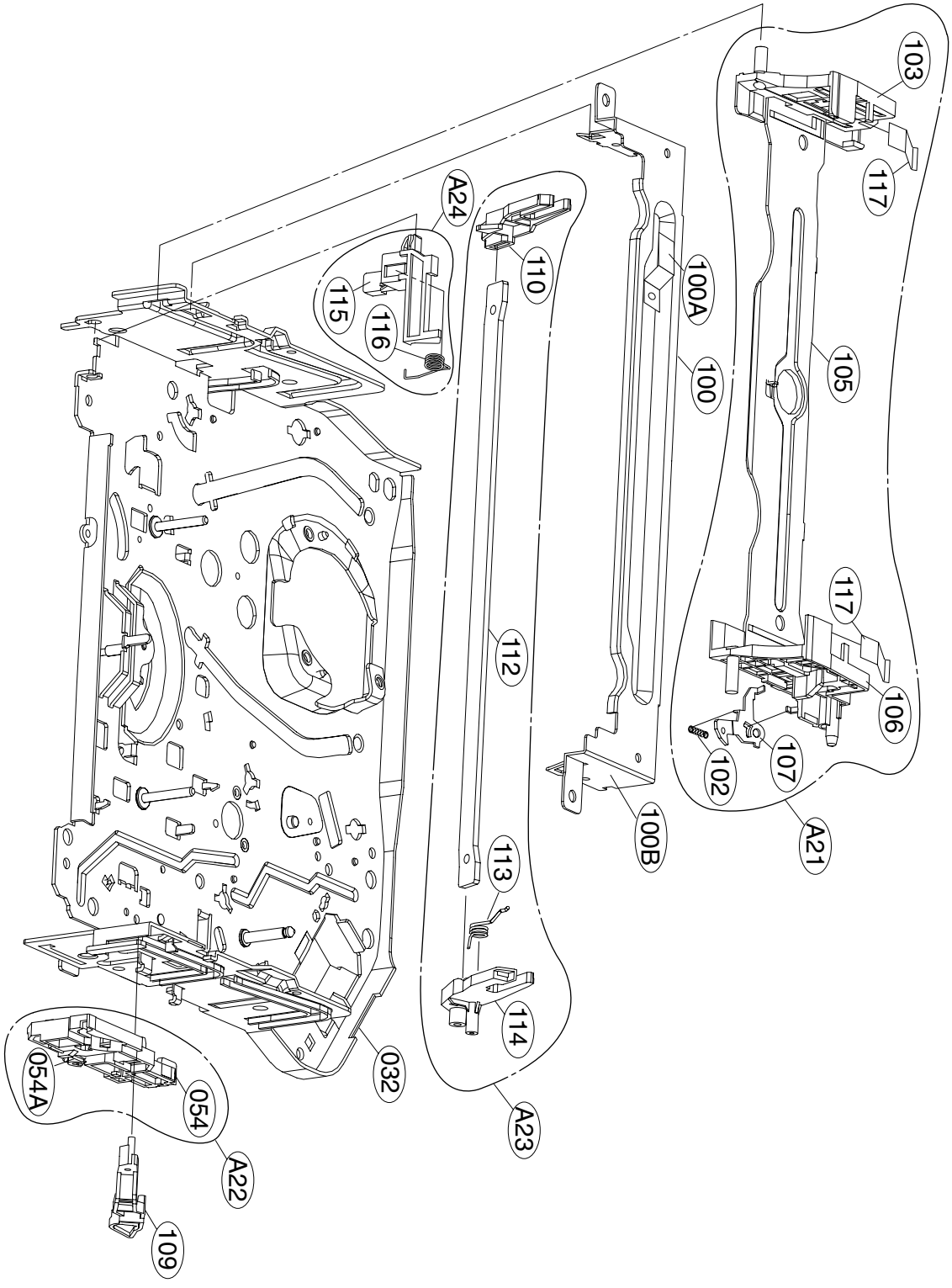


C.


Cassette does not load.
Does the cassette insert?
YES
Does the Opener Lid work?
YES
NO
Replace the Opener Lid.
Does the Gear Assembly Rack F/L work?
YES
NO
Replace the Gear Rack F/L.
Does the Opener Door work?
YES
NO
Check the opener Door assembled correctly.
Does the Arm Assembly F/L work?
YES
NO
Replace the Arm Assembly F/L.
Does the L/D Motor work?
YES
NO
Check the power of L/D Motor.
Does the Holder Assembly Cassette move the Arm Assembly F/L?
YES
NO
Check the Holder Assembly Cassette assembled correctly.
Replace the Front Loading Mechanism Assembly.

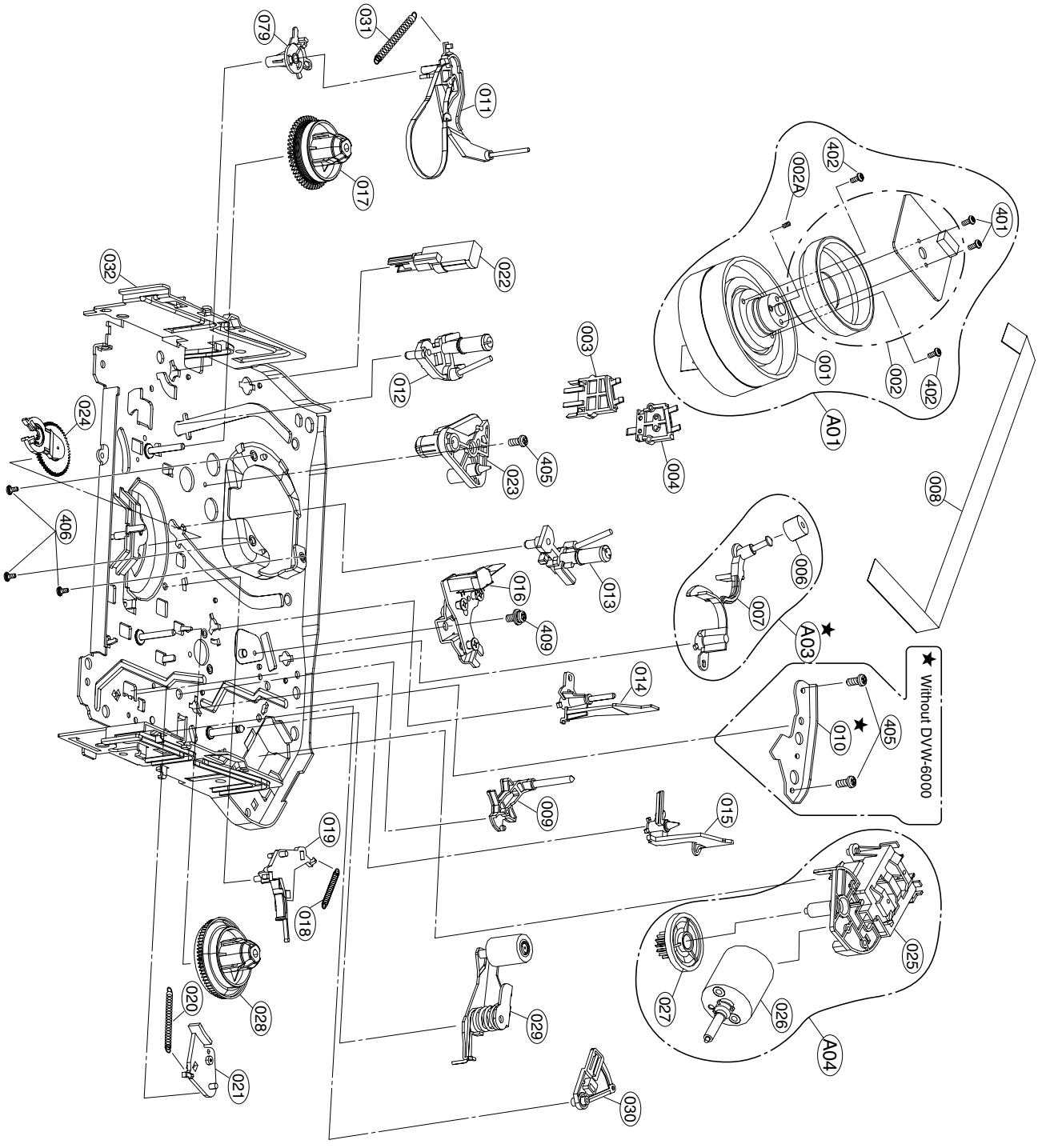
EXPLODED VIEWS

1. Front Loading Mechanism Section

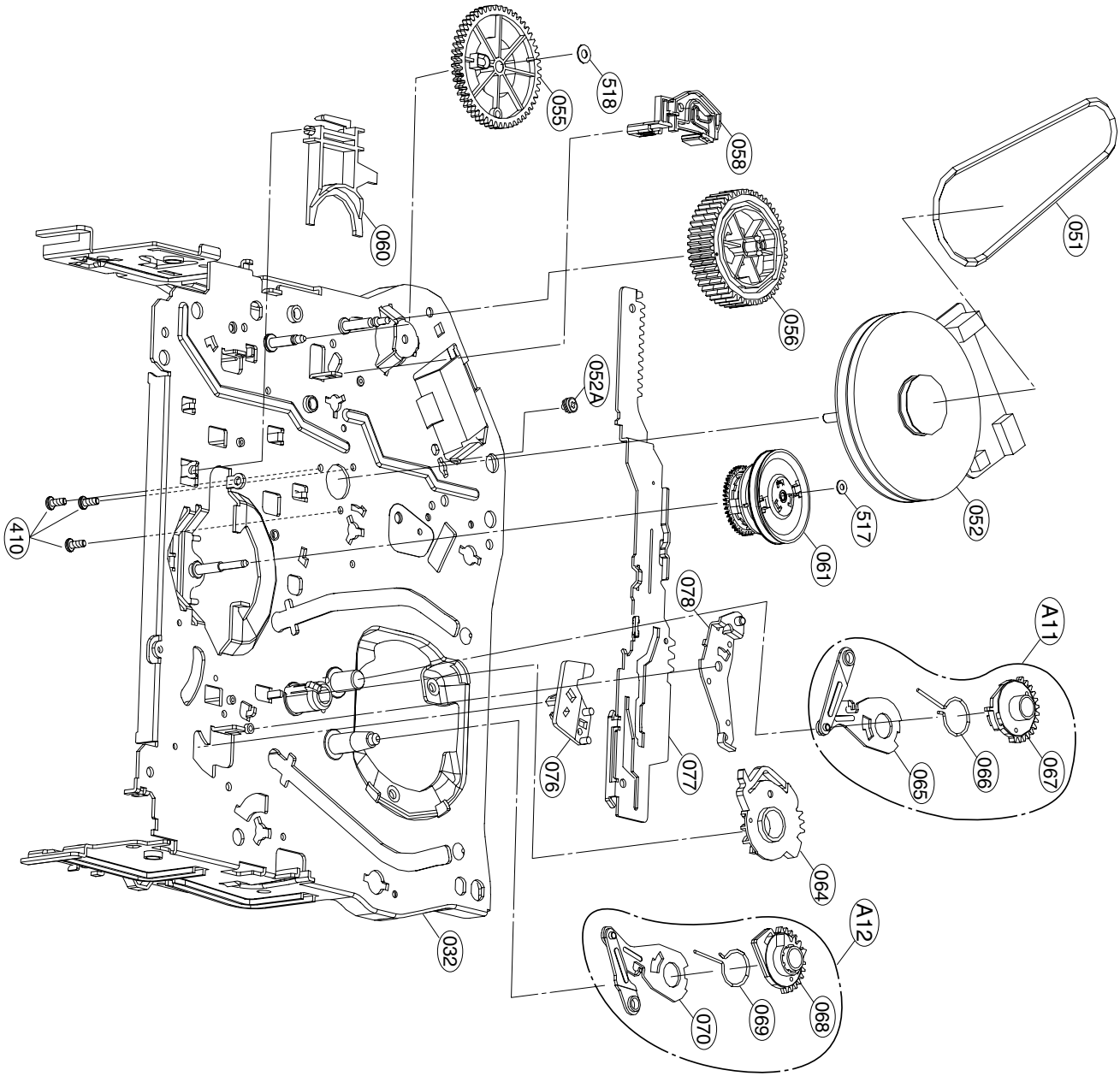


2. Moving Mechanism Section(1)

★ OPTIONAL PART



3. Moving Mechanism Section(2)



MEMO

SECTION 5 MECHANISM OF DVD PART

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EXPLODED VIEW

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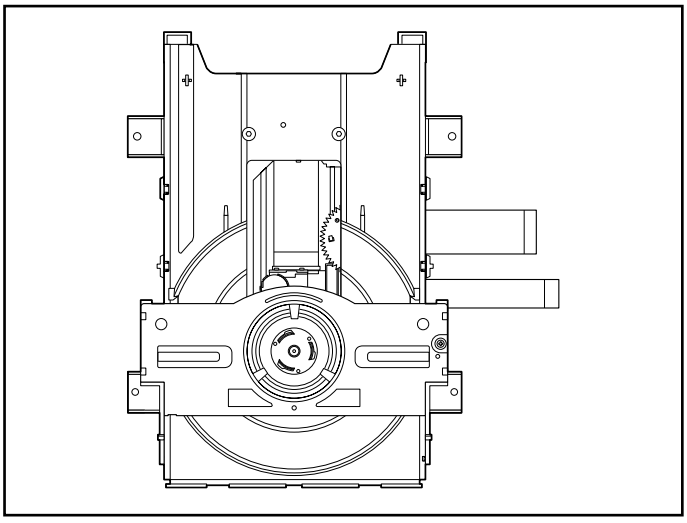
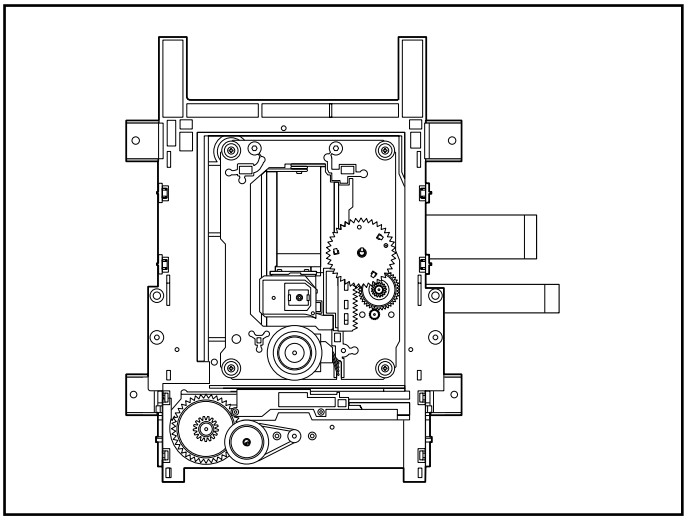
DECK MECHANISM PARTS LOCATION

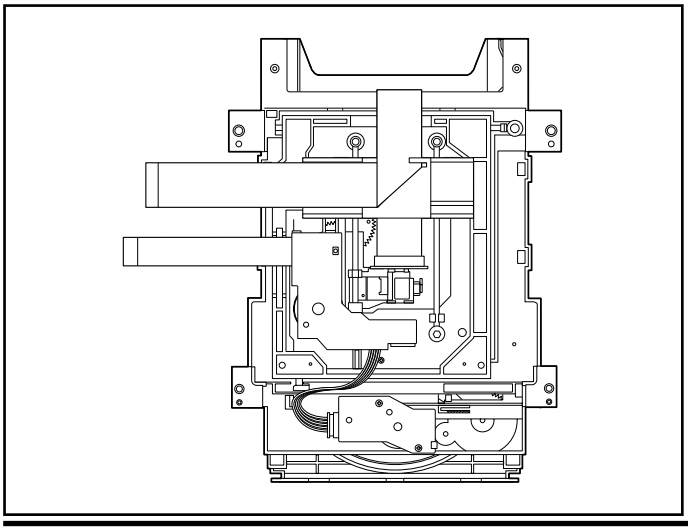
• Top View (With Tray)



• Top View (Without Tray)



• Bottom View



Procedure Starting No.		Parts	Fixing Type	Disassembly	Figure
	1	Holder Clamp	2 Screws, 2 Locking Tabs		5-1
1	2	Clamp Assembly Disc			5-1
1, 2	3	Plate Clamp			5-1
1, 2, 3	4	Magnet Clamp			5-1
1, 2, 3, 4	5	Clamp Upper			5-1
1	6	Tray Disc			5-2
1, 6	7	Base Assembly Sled			5-3
1, 2, 6	8	Gear Assembly Feed	4 Screws, 1 Connector 1 Locking Tabs		5-3
1, 2, 6, 8	9	Gear Middle			5-3
1, 2, 6, 8, 9	10	Gear Assembly Rack	1 Screw		5-3
1, 2, 7	11	Rubber Rear			5-3
1, 2, 7	12	Frame Assembly Up/Down	1 Screw	Bottom	5-4
1, 2	13	Belt Loading	1 Locking Tab		5-4
1, 2 ,13	14	Gear Pulley			5-4
1, 2, 13, 14	15	Gear Loading	1 Locking Tab		5-4
1, 2, 7, 12, 13, 14	16	Guide Up/Down			5-4
1, 2, 13	17	PWB Assembly Loading	1 Locking Tab 1 Hook 2Screw	Bottom	5-4
1, 2, 7, 12, 13, 14, 15, 16, 17	18	Base Main	2 Locking Tabs		5-4

Note

When reassembling, perform the procedure in reverse order.

The “Bottom” on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

DECK MECHANISM DISASSEMBLY

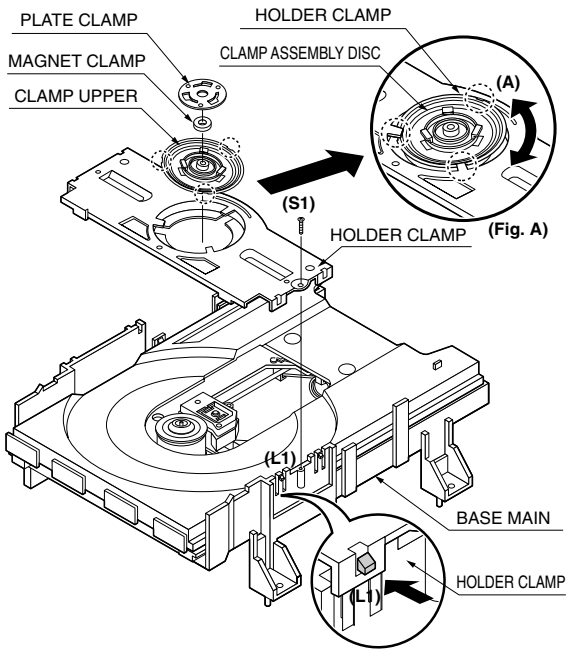


Fig. 5-1

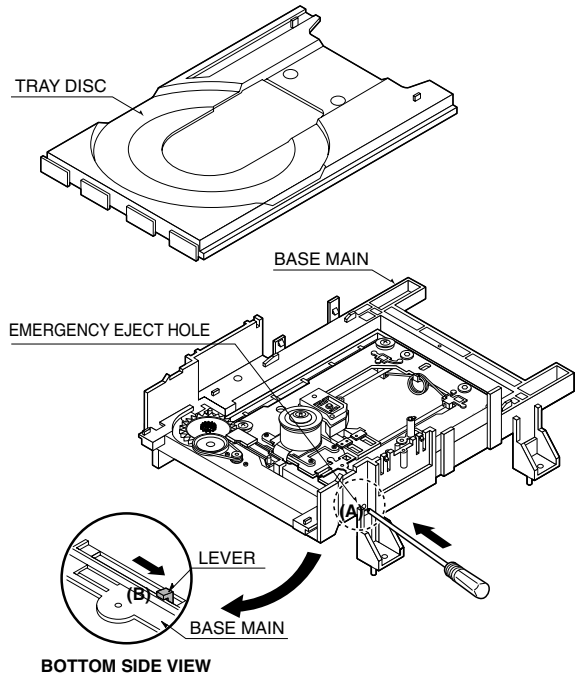


Fig. 5-2

1. Holder Clamp (Fig. 5-1)

1) Release 1 Screws(S1).
2) Unhook 2 Locking Tabs(L1).
3) Lift up the Holder Clamp and then separate it from the Base Main.

1-1. Clamp Assembly Disc

1) Place the Clamp Assembly Disc as Fig. (A)
2) Lift up the Clamp Assembly Disc in direction of arrow(A).
3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3. Clamp Upper

2. Tray Disc (Fig. 5-2)

1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
2) Pull the Tray Disc until it is separated from the Base Main completely.

DECK MECHANISM DISASSEMBLY

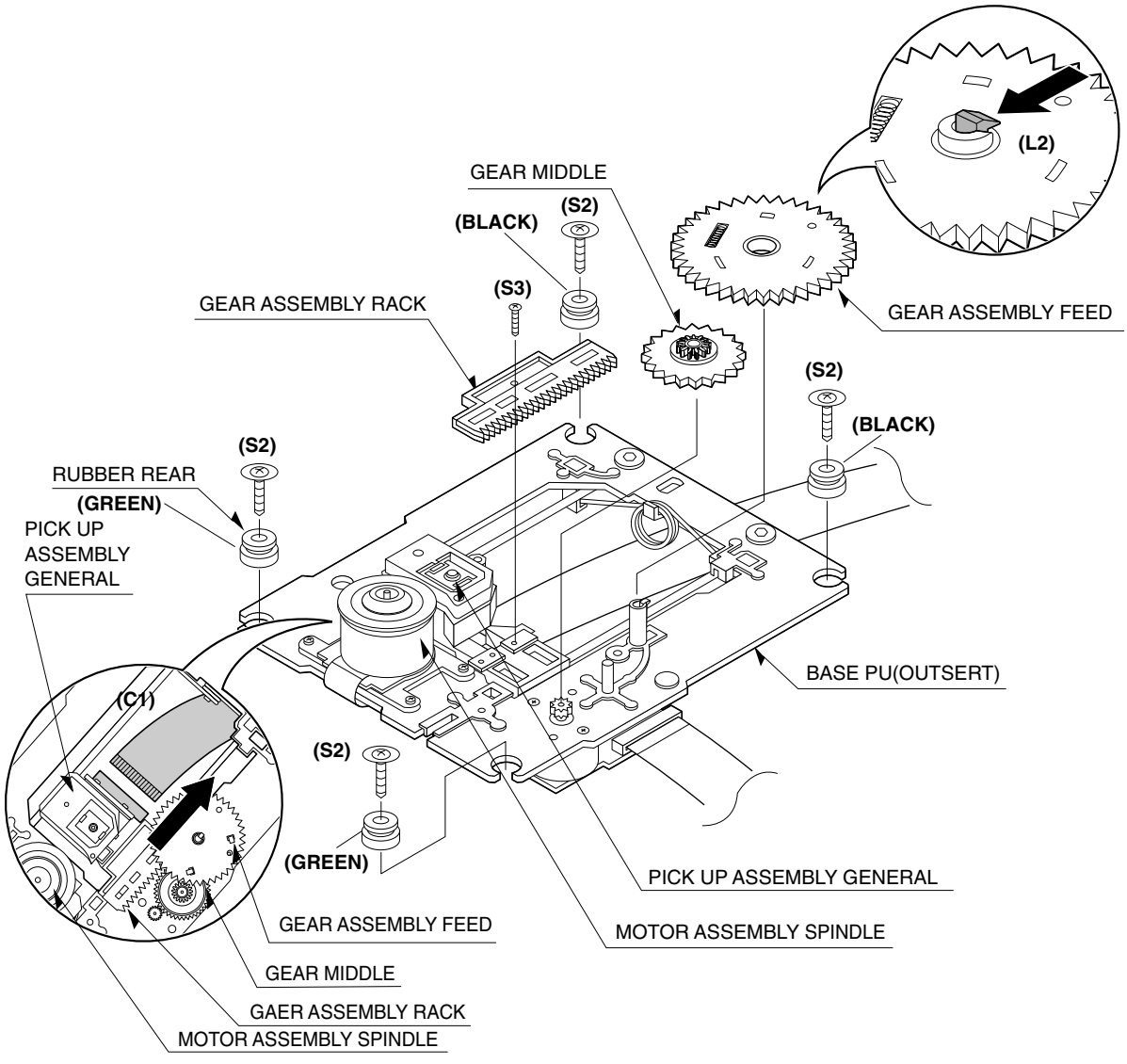


Fig. 5-3

3. Base Assembly Sled (Fig. 5-3)

1) Release 4 Screw(S2).
2) Disconnect the FFC Connector(C1)

3-1. Gear Assembly Feed

1) Unhook the Locking Tab(L2) in direction of arrow.

3-2. Gear Middle

3-3. Gear Assembly Rack

1) Release the Scerw(S3)

4. Rubber Rear (Fig. 5-3)

DECK MECHANISM DISASSEMBLY

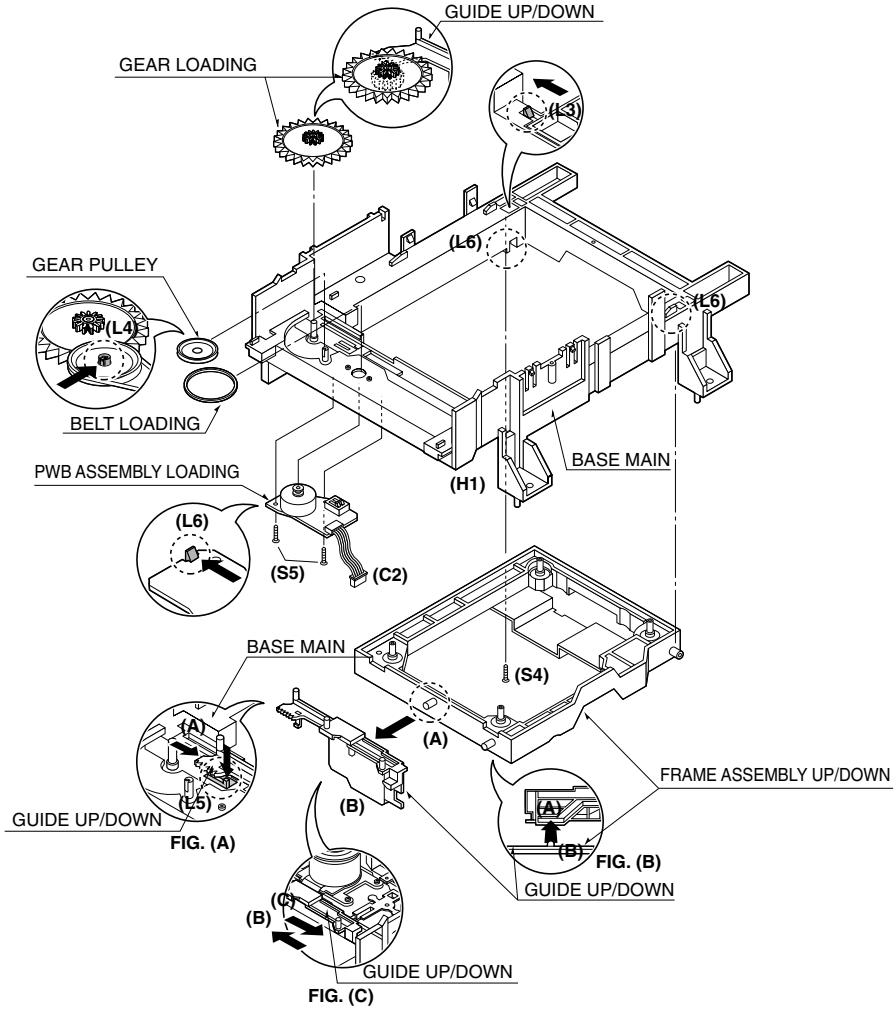


Fig. 5-4

5. Frame Assembly Up/Down (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

1) Release the Screw(S4)
2) Unlock the Locking Tab(L3) in direction of arrow and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(C) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 5-4)

Note

Put the Base Main on original position(Top Side)

7. Gear pulley (Fig. 5-4)

1) Unlock the Locking Tab(L4) in direction of arrow(B) and then separate the Gear Pulley from the Base Main.

8. Gear Loading (Fig. 5-4)

9. Guide Up/Down (Fig. 5-4)

1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

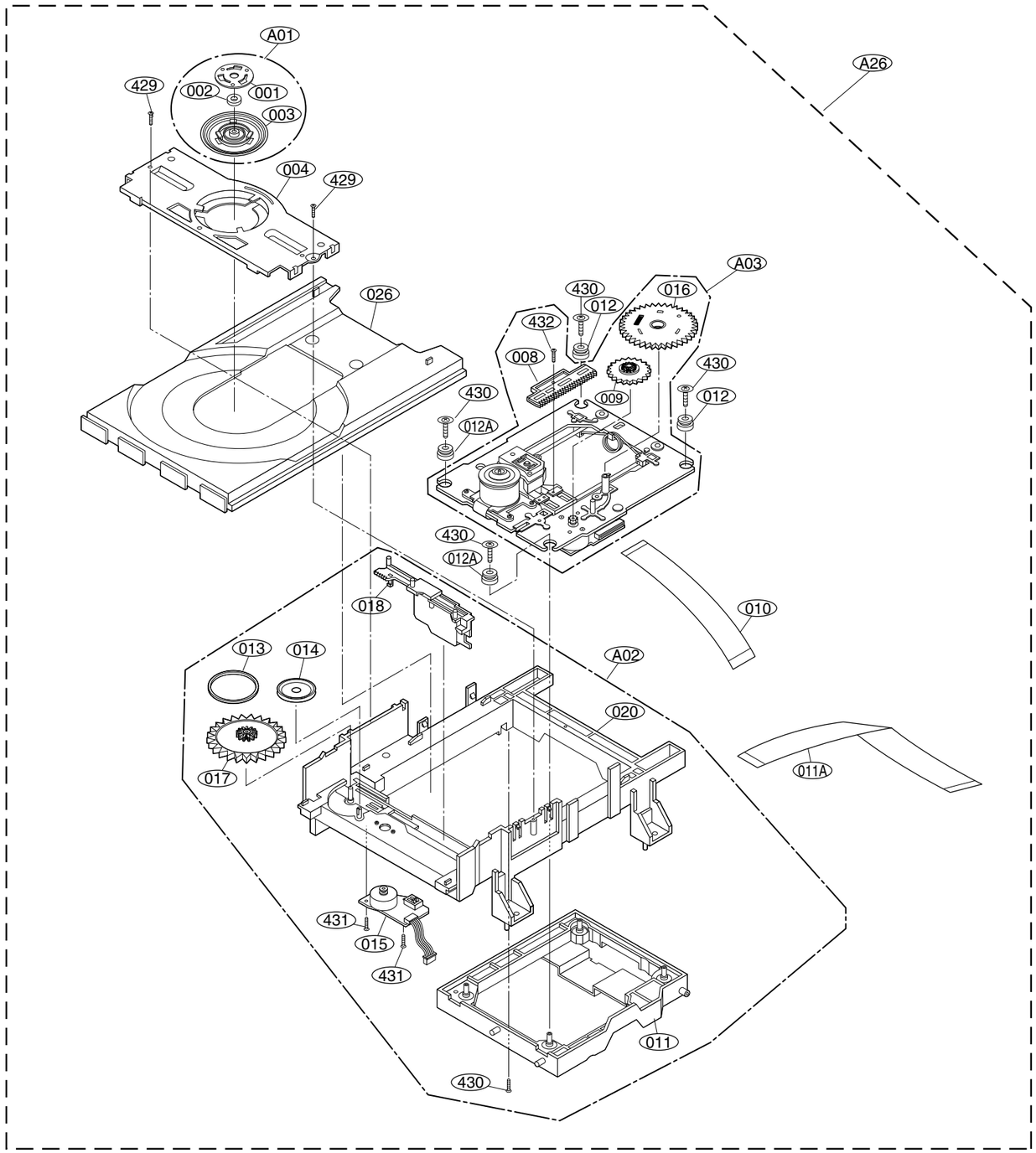
1) Release 2 Screws(S5)
2) Unkool the Loading Motor Connector (C2) from the Hook (H1) on the Base Main.
3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

11. Base Main(Fig. 5-4)

MEMO

EXPLODED VIEWS

1. Deck Mechanism Exploded View



MEMO

MEMO

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
2	79096436	4680R-B003B	MOTOR(MECH), DRUM VH4301 KUMAGAYA
002A	79096450	5202R00002C	BRUSH,CARBON, ASSY D33 (TIP+2 SPRING) 1.4,
3	79096439	4930R-0284A	HOLDER,SHELF, FPC(6CH)
4	79097553	4930R-0171A	HOLDER, CLAMP
8	79096420	4470R-0047B	GEAR, ASSY RACK (DI)
9	79097011	4470R-0053A	GEAR, MIDDLE
10	79096473	6850R-GK22Z	CABLE,FLAT, P=1.0 FFC UL2896(0.0
11	79096394	3210R-0036A	CHASSIS ASSY, MAIN (DV4510N #1 ; SH)
011A	79096474	6850R-JW14B	CABLE,FLAT, P=1.0 FFC UL2896(0.0
12	79097014	5040R-0047A	RUBBER, REAR(E2,5040H-1054A),YAMAUCHI
012A	79096063	5040R-0047C	RUBBER, DAMPER(HARDNESS=30),
13	79096234	4400R-0006A	BELT, LOADING
14	79096235	4470R-0055A	GEAR, PULLEY
15	79096477	6871RZ5130A	PWB(PCB) ASSEMBLY,OT, SUB,L/D (DP-4V,DVD+V
16	79096421	4470R-0050B	GEAR, ASSY FEED (DI)
17	79096236	4470R-0056A	GEAR, LOADING
18	79096240	4974R-0023A	GUIDE, UP/DOWN
19	79096418	4421R-0008A	BRAKE ASSEMBLY, RS
20	79096446	4970R-0128A	SPRING, COIL D35 (TB)
21	79096416	4421R-0006A	BRAKE ASSY, T
22	79096466	6520D00001A	HEAD(CIRC), D35 FE TDK FE HEAD
23	79096388	3040R-0057A	BASE, LOADING
24	79096412	4261R-0029A	ARM ASSEMBLY, IDLER (N)
26	79097326	3390R-0005A	TRAY, DISC
28	79096415	4408R-0004A	REEL, T
29	79096410	4261R-0019A	ARM ASSY, PINCH
30	79096432	4510R-0043A	LEVER, T/UP
31	79096444	4970R-0123A	SPRING, COIL TENSION(D35)
51	79096414	4400R-0005A	BELT, CAPSTAN
52	79096435	4680R-A006A	MOTOR(MECH), CAPSTAN MCVC-035AA L
052A	79096449	4980R-0023A	SUPPORTER, CAPSTAN(D35)
54	79096425	4470R-0100A	GEAR, RACK F/L
054A	79096445	4970R-0124B	SPRING, COIL D35 (RACK F/L)
55	79096423	4470R-0097A	GEAR, DRIVE(D35)
56	79096422	4470R-0096A	GEAR, CAM(D35)
58	79096417	4421R-0007A	BRAKE ASSY, CAPSTAN
60	79096429	4510R-0040A	LEVER, F/R(D35)
61	79096413	4265R-0006A	CLUTCH ASSEMBLY, D35 (N)
64	79096424	4470R-0098A	GEAR, SECTOR(D35)
76	79096434	4510R-0047A	LEVER, SPRING
77	79096396	3300R-M116A	PLATE, SLIDER
C309	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C310	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C311	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C312	79096273	0CE3364F638	CAPACITOR,FIXED ELECTROLYTIC, 33UF SRA,SS 16V 20% FM5 TP 5
C313	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C314	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C315	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C316	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C317	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C318	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C319	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C320	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C321	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C322	79096292	0CH4101K416	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 2012 R/TP
78	79096430	4510R-0041A	LEVER, TENSION
79	79096387	3040R-0056A	BASE, TENSION(D35)
100	79096400	3301R-M022A	PLATE ASSEMBLY, TOP
100A	79096395	3300R-0184A	PLATE, GND
100B	79096397	3300R-M118A	PLATE, TOP(D35)
102	79096447	4970R-0130A	SPRING, COIL D35 (STOPPER)
109	79096455	5870R-0004A	OPENER, DOOR
115	79096431	4510R-0042A	LEVER, SWITCH
116	79096448	4970R-0138A	SPRING, COIL D35 SWITCH
117	79096398	3300R-M137A	PLATE, SPRING CST
250	79096391	3110R-V004A	CASE, TOP(COMBI-2) PRESS (
274	79096399	3300R-V032A	PLATE, VB602M PRESS SUS 0.2
276	79096440	4930R-0298B	HOLDER,SHELF, TIMER PWB(D+V-RIB CU
283	79096405	3580R-V054A	DOOR,CASE, CST (VCR) TOSHIBA CO
284	79096419	442-681A	SPRING, DOOR
285	79096404	3580R-T084A	DOOR,CASE, TRAY (TOSHIBA COMBI)
300	79096464	6410RAHP02D	POWER CORD, HIT-110/NISPT-2X18AW
323	79096392	3111R-0089B	CASE ASSY, PRE-AMP (PBSB-SH)
330	79096393	3140R-V001A	CHASSIS, COMBI-2 PRESS
401	79096380	1MEC0261518	SCREW MACHINE,PAN HE, #NAME?
C338	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C339	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C340	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C341	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C342	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C343	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C344	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C346	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C347	79096290	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C348	79096290	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C349	79096288	0CH1333K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 2012 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C350	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C351	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C354	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C286	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C287	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C288	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C289	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C290	79098720	0CH4180K412	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 1608 R/TP
C291	79098720	0CH4180K412	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 1608 R/TP
C292	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C293	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C294	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C295	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C296	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C297	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C298	79092008	0CE4774C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 6.3V 20% FM5 TP 5
402	79096382	1MPC0261418	SCREW MACHINE,PAN HEAD, #NAME?
405	79096383	1SZZR-0031B	SCREW,DRAWING, + 1 D2.6 L5.8 SWRCH1
406	79096381	1MEC0302018	SCREW MACHINE,PAN HEAD SPR W, #NAME?
409	79096384	1SZZR-0032B	SCREW,DRAWING, + 1 D2.6 L5.0 SWRCH1
410	79096379	1APF0262218	SCREW TAP TITE(B),PAN HEAD, #NAME?
429	79096221	1SZZR-0012A	SCREW,DRAWING, B-TITE
430	79097901	1SZZH-1003A	SCREW,DRAWING, + D2.0 6MM SWRCH16A/NIY 4.5MM 1.5MM MACHINE PAN PL
431	79096220	1SZZH-1007B	SCREW,DRAWING, + D2.0 6MM SWRCH16A/ZNBK 4MM 1.2MM TAPPING PAN NO
432	79097902	1SZZR-0011A	SCREW,DRAWING, MACHINE
452	79097905	353-051A	SCREW,DRAWING, SPECIAL
457	79097907	353-051E	SCREW,DRAWING, SPECIAL (3X12)
465	79097903	353-046K	SCREW,DRAWING, SPECIAL (3X10 B.K)
467	79096043	353-051G	SCREW,DRAWING, + 2 D3.0 L8.0 MSWR3/
517	79096386	1WZZR-0004D	WASHER,DRAWING, STOPPER
518	79096385	1WZZR-0004A	WASHER,DRAWING, STOPPER
801	79096407	3835RM0056F	INSTRUCTION ASSEMBLY, VCR VB602M.NA1UTT TO
802	79096408	3890R-H529V	BOX, VB602M NA1UTT SWM3-A
803	79096409	3920R-E064A	PACKING,CASING, DC69_S 0.02 200 EPS
C2D7	79098716	0CH1152K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% X7R(X) 1608 R/TP
C2D9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2E1	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2E2	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C2E3	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2E4	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2M1	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C2M2	79092022	0CH1682K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% X7R(X) 1608 R/TP
C2M3	79092020	0CH1472K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% X7R(X) 1608 R/TP
C2M4	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M5	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M6	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M7	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
806	79096472	6850R-CAA22	CABLE,COAXIAL, 1200M/M NTSC-NTSC DO
808	79096451	534-008C	BATTERY,MN, AAAM(R03) 1.5V 1PAIR(LOCAL)
810	79096475	6851RN0006L	CABLE ASSY,RF, CABLE ASSY,RF/RCA US
811	79096073	6611R1G001A	PLUG ASSY, 1WAY YELLOW GLOBAL
812	79096074	6611R2G001A	PLUG ASSY, 2WAY RED/WHITE GLOBA
900	79096470	6711R2N080A	REMOTE CONTROLLER AS, TOSHIBA VB602M DVD+
A01	79096438	4861R-0015A	CLAMP ASSEMBLY, DISC(DP-5) DI
A02	79096389	3041R-M004A	BASE ASSEMBLY, MAIN (DP4) DI-IDECK
A03	79096390	3041R-M005A	BASE ASSEMBLY, SLED (DP5) DI
A04	79096437	4811RF0038A	BRACKET ASSEMBLY, L/D(S)
A11	79096427	4471R-0005A	GEAR ASSY, P3
A12	79096426	4471R-0004A	GEAR ASSY, P2
A21	79096442	4931R-0047A	HOLDER ASSY, CST
A22	79096428	4471R-0006A	GEAR ASSY, RACK F/L
A23	79096411	4261R-0023A	ARM ASSY, F/L
A24	79096433	4510R-0046A	LEVER, ASSY SWITCH
A42	79096402	3501R-6412A	BOARD ASSEMBLY, VCR VB602M KEY
A43	79096406	3721R-F324A	PANEL ASSEMBLY,FRONT, VB602M NA1UTT
A46	79096403	3501R-8310A	BOARD ASSEMBLY, VCR VB602M MAIN
A46A	79096478	6885R-1010B	SUB PWB(PCB) ASSEMBL, 5553004E100500 FF 09
A48	79096476	6871R-8311A	PWB(PCB) ASSEMBLY,TO, VB602M NA1UTT POWER
A49	79096401	3501R-6411A	BOARD ASSEMBLY, VCR VB602M TIMER
BD01	79091008	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD02	79091008	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD101	79096005	0DD160000DA	DIODE,RECTIFIERS, S1WBA60 BK SHINDENGEN - 600V - - - -
C101	79096244	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C102	79096244	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C103	79092004	0CE157CR610	CAPACITOR,FIXED ELECTROLYTIC, 150UF SHL,SD 250V 20% FL BULK
C105	79092033	0CQ1031Y519	CAPACITOR,FIXED FILM, 0.01UF D 630V 10% PE NI TP5
C106	79092036	624-087B	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 100P/1KV SMPS SAMHWA
C107	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C108	79096274	0CE336BH638	CAPACITOR,FIXED ELECTROLYTIC, 33UF KME TYPE 25V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C109	79096303	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C110	79096279	0CG1020U630	CAPACITOR,SEMI CERAM, 1000PF 400V M E(Z5U)
C111	79096148	0CG2220U630	CAPACITOR,SEMI CERAMIC, 2200PF D 400V 20% E(Z5U) R
C299	79092024	0CH4220K412	CAPACITOR,FIXED CERAMIC(High dielectric), 22PF 50V 5% NP0 1608 R/TP
C2A0	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2A3	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2A4	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2A5	79098719	0CH1683F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.068UF 16V 80%,-20% Y5V(F) 1608 R/TP
C2A6	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2A7	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2A8	79098716	0CH1152K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% X7R(X) 1608 R/TP
C2A9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2B3	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C2B4	79098719	0CH1683F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.068UF 16V 80%,-20% Y5V(F) 1608 R/TP
C2B5	79092019	0CH1333K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 1608 R/TP
C2B9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C121	79092005	0CE2276F638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 16V 20% FM5 TP 5
C123	79092010	0CE477BH630	CAPACITOR,FIXED ELECTROLYTIC, 470UF KME TYPE 25V 20% FM5 BULK
C126	79096270	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 25V 20% FM5 TP 5
C127	79092003	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC, 1000UF KME TYPE 16V 20% FM5 BULK
C128	79092007	0CE3376D638	CAPACITOR,FIXED ELECTROLYTIC, 330UF SMS,SG 10V 20% FM5 TP 5
C129	79096271	0CE228BF630	CAPACITOR,FIXED ELECTROLYTIC, 2200UF KME TYPE 16V 20% FM5 BULK
C130	79092035	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C131	79096460	624-082H	CAPACITOR,FIXED ELECTROLYTIC, CE 1000UF/10V SHL(10*12.5)T/P
C132	79092035	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C133	79098731	0CQ1042K409	CAPACITOR,FIXED FILM, 0.1UF S 50V 5% PE TP5
C151	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C152	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C153	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C154	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C155	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C323	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C324	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C325	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C327	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C328	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C329	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C330	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C331	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C332	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C333	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C334	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C335	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C336	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C337	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C512	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C513	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C514	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C515	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C516	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C517	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C518	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C519	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C520	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C521	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C522	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C523	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C525	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C159	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C161	79096276	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C163	79096461	624-087H	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 220PF/1KV CERAMIC
C201	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C202	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C203	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C204	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C205	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C206	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C207	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C208	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C209	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C210	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2C1	79092013	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% X7R(X) 1608 R/TP
C2C2	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2C4	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2C5	79098717	0CH1332K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3300PF 50V 10% X7R(X) 1608 R/TP
C2C6	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2C8	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2C9	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2D0	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D1	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D2	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2D3	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2D4	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D5	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2D6	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M8	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N1	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N3	79092017	0CH1223K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N4	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C301	79096304	0CQ2232L559	CAPACITOR,FIXED FILM, 0.022UF S 63V 10% PP NI TP5
C302	79096278	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C303	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C304	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C305	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C306	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C307	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C308	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C355	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C360	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C3F1	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C3F2	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C3F3	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C401	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C402	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C403	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C404	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C405	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C406	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C408	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C409	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C410	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C211	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C212	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C213	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C214	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C215	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C216	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C224	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C225	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C226	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C229	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C230	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C231	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C232	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C425	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C500	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C501	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C502	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C503	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C504	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C505	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C506	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C507	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C508	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C509	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C510	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C511	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C541	79098721	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C542	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C543	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C544	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C545	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C546	79096277	0CE4764H638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 25V 20% FM5 TP 5
C549	79092025	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C550	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C551	79096287	0CH1333H516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 25V 10% B(5YP) 2012 R/TP
C552	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C553	79092025	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C554	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C555	79097121	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C238	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C239	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C240	79092016	0CH1222K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2200PF 50V 10% X7R(X) 1608 R/TP
C242	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C245	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C251	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C252	79092023	0CH4100K112	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 0.5 pF NP0 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C253	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C254	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C255	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C258	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C261	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C262	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C411	79096022	0CH1102K512	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 1608 R/TP
C412	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C413	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C414	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C415	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C416	79096022	0CH1102K512	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 1608 R/TP
C417	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C418	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C419	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C420	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C421	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C422	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C423	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C424	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C526	79096278	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C527	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C528	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C529	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C530	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C531	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C532	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C533	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C534	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C535	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C536	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C538	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C540	79092024	0CH4220K412	CAPACITOR,FIXED CERAMIC(High dielectric), 22PF 50V 5% NP0 1608 R/TP
C263	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C264	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C265	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C272	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C273	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C274	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C277	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C278	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C279	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C280	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C281	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C282	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C284	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C285	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
L501	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L502	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L503	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L504	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L505	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L506	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L507	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L508	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L509	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L510	79096335	0LR0682K035	INDUCTOR,RADIAL LEAD, 68UH 10% TP 6 X 6 TR5 -
L511	79096334	0LR0221J0N5	INDUCTOR,RADIAL LEAD, 2.2UH 5% TP 3X5 TR5
L512	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L601	79096336	0LR8200J025	INDUCTOR,RADIAL LEAD, 820UH 5% TP 4 X 5 TR5 -
L602	79096332	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L603	79096332	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L706	79096333	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
D113	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D114	79096008	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D115	79096008	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D121	79096305	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D201	79096309	0DR495009AA	DIODE,RECTIFIERS, RB495D TP ROHM SMD 40V 400A 2A - 70UA
D2A1	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D2A2	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D2A3	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D401	79096310	0DSRM00118A	DIODE,SWITCHING, DAP202K T146 ROHM R/
D802	79096305	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
DG601	79096462	6302R-V128A	DIGITRON, 11-MT-139GK FUTABA S
ES501	79096443	4931R-0050C	HOLDER ASSEMBLY, END (DI)
ES502	79096443	4931R-0050C	HOLDER ASSEMBLY, END (DI)

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
F101	79096318	0FS1601B51B	FUSE,SLOW BLOW, 1600MA 250 V 5.2X20
F102	79097595	GIRH200000B	IC,ROHM, ICP-N20 T104 TP IC D
F601	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
C556	79097121	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C557	79098721	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C558	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C559	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C560	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C561	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C566	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C567	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C568	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C569	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C570	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C571	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C572	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C821	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C822	79096285	0CH1222K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2200PF 50V 10% B(5YP) 2012 R/TP
C823	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C825	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C826	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C827	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C828	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C829	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C830	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C831	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C832	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C833	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C834	79096289	0CH1472K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% B(5YP) 2012 R/TP
C836	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C573	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C574	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C577	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C578	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C579	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C580	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C581	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C582	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C583	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C584	79096276	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C585	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C586	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C588	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
JK603	79096452	572-034H	JACK,RCA, BJP-303S-02(RED),AU-PLATED
L102	79096456	616-145G	FILTER(CIRC), SHT LFSQ2215V4-04220
L122	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L123	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L124	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L201	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L206	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L207	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L208	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L2A1	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L2A2	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L301	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L302	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L303	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L305	79096333	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L3F1	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
C589	79096295	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C590	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C592	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C593	79096300	0CH4471K416	CAPACITOR,FIXED CERAMIC(High dielectric), 470PF 50V 5% NP0 2012 R/TP
C594	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C595	79096326	0CH4120K416	CAPACITOR,FIXED CERAMIC(High dielectric), 12PF 50V 5% NP0 2012 R/TP
C596	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C597	79096302	0CH4681K416	CAPACITOR,FIXED CERAMIC(High dielectric), 680PF 50V 5% NP0 2012 R/TP
C598	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C599	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C5L1	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C601	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C602	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C838	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C839	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C840	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C841	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C842	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C843	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C844	79096289	0CH1472K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% B(5YP) 2012 R/TP
C845	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C846	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C847	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C848	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C849	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C851	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C853	79096280	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
Q303	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q304	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q305	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q306	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q307	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q308	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q309	79095001	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q310	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q401	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q404	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q405	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q501	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q503	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q504	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q505	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
C854	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C866	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C871	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C872	79096301	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C873	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C874	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C875	79096288	0CH1333K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 2012 R/TP
C876	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C877	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C878	79096301	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C879	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C880	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C881	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C882	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
F602	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
F603	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
FL301	79096463	633-032K	COIL,CAN, BIAC OSC,1CHIP 5V(KS-75M)
IC101	79096329	0IPMGFF001A	IC,POWER MANAGEMENT, ICE2B265 INFINEON 8

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
IC102	79094030	657-063A	SENSOR, LTV-817B,PHOTO COUPLER(LITEON)
IC103	79094010	0IKE431000A	IC,KEC, KIA431 - - - -
IC151	79098753	0IPMGKE008B	IC,POWER MANAGEMENT, KIA78R08PI CU KEC 4P
IC152	79096328	0IPMGFA046A	IC,POWER MANAGEMENT, KA278R33TSTU FAIRCHI
IC201	79098742	0ILNRHY002B	IC,LINEAR, HDC25D811B HYUNDAI 2
IC203	79097518	0IEB121616B	IC,ELITE MEMORY TECH, M12L16161A-7T-L 50PI
IC206	79094027	GITO704000F	IC,TOSHIBA, TC7W04FU
IC2A1	79098741	0ILNRHI003A	IC,LINEAR, HD153702TF HITACHI 6
IC2A2	79094009	0IJR341400C	IC,JRC, NJM3414AM-TE1,3K/REEL. JRC - - - -
IC2A4	79098738	0IKE393000G	IC,KEC, KIA393F-EL FLP-8 TP DUAL COMPARATOR =(NJM2903M)
IC2M1	79097140	0IFA303200A	IC,FAIRCHILD, KA3032 48QFP BK 5CH MOTOR DRIVER
IC301	79096024	0ICTMHY011A	IC,CUSTOMIZED, HS353106 HYNIX 100 T
IC302	79096321	0IJR223400D	IC,JRC, NJM2234L SIP8 ST S/W IC(3INPUT,1OUTPUT)
R159	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R163	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R164	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R167	79096028	0RD0471F608	RESISTOR,FIXED CARBON FILM, 4.7 OHM 1/6 W 5.00% TA26
R168	79096028	0RD0471F608	RESISTOR,FIXED CARBON FILM, 4.7 OHM 1/6 W 5.00% TA26
R170	79093005	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R171	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R201	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R202	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R203	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R204	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R207	79093030	0RH1004C622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 16 W 1608 5.00% D
R217	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R218	79093044	0RH4700C622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 16 W 1608 5.00% D
R219	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
C603	79096303	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C604	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C606	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C607	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C608	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C609	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C610	79096268	0CE1074C638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 6.3V 20% FM5 TP 5
C611	79097123	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C612	79097123	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C613	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C614	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C701	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C702	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C703	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C883	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C884	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C885	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C886	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C887	79096272	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC, 3.3UF SRA,SS 50V 20% FM5 TP 5
C888	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C889	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
CS501	79096468	6600M000002	SWITCH,PUSH, MPU11810MLB0 MIC DC
D101	79096002	0DD010009CA	DIODE,RECTIFIERS, EG01C TP SANKEN - - - - - -
D102	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D107	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D108	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D110	79096308	0DR302000AB	DIODE,RECTIFIERS, HER302 BK RECTRON DO201AD 100V 3A 200A 50SEC -
D111	79096009	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
D112	79096009	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
IC305	79094008	0IHY576532A	IC,HYUNDAI, HY57V653220CTC-7 86P
IC3F1	79097149	0IMMRFU001B	IC,MEMORIES, MBM29LV800BA-90PFTN
IC3F1A	79096479	6957R-254AB	PROGRAM, VB602M EVNT DVD PROG
IC401	79098755	0IPRPCI003B	IC,PERIPHERALS, CS4391-KZR CIRRUS LO
IC402	79098737	0IJR458000B	IC,JRC, NJM4580M 8,DMP8 TP OP AMP 2K/REEL
IC501	79098747	0INS860200A	IC,NATIONAL SEMICOND, NDV8602 240 VQFP BK
IC502	79098744	0IMMRAL012A	IC,MEMORIES, AT93C56-10SC-2.7-8S1
IC503	79096319	0IAL241600B	IC,ATMEL, AT24C16 - - - -
IC504	79096322	0IKE703100A	IC,KEC, KIA7031P 3P 3.1V RESET(TAPING) - - - -
IC505	79098739	0IKE704200B	IC,KEC, KIA7042P(AT) TO-92 4.2V RESET - - - -
IC506	79096327	0IPMGA7001A	IC,POWER MANAGEMENT, AMC1117-1.8SJ ADD MI
IC601	79096331	0IPRPNE001A	IC,PERIPHERALS, UPD16315GB-3BS NEC 4
IC602	79096330	0IPRPMT006A	IC,PERIPHERALS, MM1225XFBE MITSUMI 8
IC801	79096324	0ILNRSA013A	IC,LINEAR, LA72670M-MPB SANYO 8
J802	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
JK601	79096454	572-034K	JACK,RCA, BJP-303S-04(YL),AU-PLATED
JK602	79096453	572-034J	JACK,RCA, BJP-303S-03(WH),AU-PLATED
C704	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C706	79096298	0CH4300K416	CAPACITOR,FIXED CERAMIC(High dielectric), 30PF 50V 5% NP0 2012 R/TP
C707	79096298	0CH4300K416	CAPACITOR,FIXED CERAMIC(High dielectric), 30PF 50V 5% NP0 2012 R/TP
C708	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C731	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C751	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C752	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C801	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C803	79096280	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C804	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C806	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C807	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C808	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C816	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
R2M3	79093051	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R2M5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M6	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2M7	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2M8	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M9	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2N0	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2N1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N2	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2N3	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2N4	79093035	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R2N5	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2N6	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N7	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N8	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
Q506	79095001	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q507	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q601	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q602	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q701	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q702	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q805	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
R100	79093009	0RD1504H632	RESISTOR,FIXED CARBON FILM, 1.5M OHM 1/2 W 5.00% MF10
R101	79093056	614-007A	RESISTOR,FIXED CEMENT, 2.7/2W CEMENT SMPS V
R104	79093055	0RS5602K619	RESISTOR,FIXED METAL OXIDE FILM, 56K OHM 2 W 5.00% TR
R105	79093001	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R106	79093001	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R107	79096376	0RS0350K619	RESISTOR,FIXED METAL OXIDE FILM, 0.35 OHM 2 W 5.00% TR
R111	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R112	79093011	0RD2200F608	RESISTOR,FIXED CARBON FILM, 220 OHM 1/6 W 5.00% TA26
R598	79096348	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R599	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C6	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R601	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R602	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R603	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R604	79096341	0RD5602F608	RESISTOR,FIXED CARBON FILM, 56K OHM 1/6 W 5.00% TA26
R605	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R608	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R610	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R611	79096342	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R612	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R613	79093007	0RD1201F608	RESISTOR,FIXED CARBON FILM, 1.2K OHM 1/6 W 5.00% TA26
R614	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R615	79098761	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R2C8	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C9	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D0	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D1	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R2D2	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2D3	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D4	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D5	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R2D6	79093026	0RH0912C622	RESISTOR,METAL GLAZED(CHIP), 91 OHM 1 / 16 W 1608 5.00% D
R2E6	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2E7	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2E8	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2F1	79098771	0RH2200C622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 16 W 1608 5.00% D
R2F2	79098771	0RH2200C622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 16 W 1608 5.00% D
R2F3	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R113	79098761	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R114	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R115	79096375	0RN3301F408	RESISTOR,FIXED METAL FILM, 3.3K OHM 1/6 W 1.00% TA26
R116	79096374	0RN2701F408	RESISTOR,FIXED METAL FILM, 2.7K OHM 1/6 W 1.00% TA26
R117	79096339	0RD2700F608	RESISTOR,FIXED CARBON FILM, 270 OHM 1/6 W 5.00% TA26
R118	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R119	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R131	79093012	0RD2203F608	RESISTOR,FIXED CARBON FILM, 220K OHM 1/6 W 5.00% TA26
R132	79093012	0RD2203F608	RESISTOR,FIXED CARBON FILM, 220K OHM 1/6 W 5.00% TA26
R153	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R154	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R155	79096338	0RD1802F608	RESISTOR,FIXED CARBON FILM, 18K OHM 1/6 W 5.00% TA26
R156	79093005	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R157	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R158	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
L822	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
LD501	79096441	4931R-0017C	HOLDER ASSY, LED(DI-CKD)LOCAL
LED601	79096306	0DL112000AK	LED, DL-11S2GNS(SUPPER,GREEN,03)KOC
LED602	79096307	0DL342009DA	LED, SLR-342YY TP ROHM YE
MS501	79096467	6600JB8005B	SWITCH,MODE, NON 5V 1MA VERTICAL
Q156	79097535	0TR320509AB	TRANSISTOR,BIPOLARS, KTC3205-TP-Y (KTC2236A)KEC
Q160	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q161	79097532	0TR126809BA	TRANSISTOR,BIPOLARS, KTA1268-BL TP KEC - -
Q162	79096377	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q2A1	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q2A2	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q2A5	79098781	0TR388209AA	TRANSISTOR,BIPOLARS, CHIP KTC3882 SOT-23
Q2A6	79098781	0TR388209AA	TRANSISTOR,BIPOLARS, CHIP KTC3882 SOT-23
Q2M1	79098777	0TR124009AP	TRANSISTOR,BIPOLARS, DTC124EK TP ROHM KOREA SOT23 3K/R
Q301	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q302	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
R220	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R230	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R231	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R232	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R233	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R234	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R235	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R236	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R237	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R239	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R240	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R241	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R242	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R243	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R252	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R523	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R524	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R525	79091002	0LC0233002B	INDUCTOR,CHIP, HB-1S1608-800JT CERA
R526	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R528	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R529	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R530	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R531	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R532	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R533	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R534	79093049	0RH6800C622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 16 W 1608 5.00% D
R535	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R536	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R537	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R538	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R269	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R273	79093034	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R274	79093048	0RH6200C622	RESISTOR,METAL GLAZED(CHIP), 620 OHM 1 / 16 W 1608 5.00% D
R275	79093034	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R276	79093052	0RH9100C622	RESISTOR,METAL GLAZED(CHIP), 910 OHM 1 / 16 W 1608 5.00% D
R277	79093057	0RH1500C622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 16 W 1608 5.00% D
R278	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R279	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R281	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R290	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R291	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R292	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2A1	79093026	0RH0912C622	RESISTOR,METAL GLAZED(CHIP), 91 OHM 1 / 16 W 1608 5.00% D
R2A2	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2A6	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2F4	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2F5	79098772	0RH2202C422	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 16 W 1608 1.00% D
R2F6	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2F7	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2F8	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2F9	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G1	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G2	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G3	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R2G4	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2G7	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2G9	79093057	0RH1500C622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 16 W 1608 5.00% D
R2M1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M2	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2A9	79098774	0RH5602C622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 16 W 1608 5.00% D
R2B0	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B2	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B3	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B4	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2B5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B6	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B7	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B8	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2C0	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C4	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2C5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2C6	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C7	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2N9	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P0	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R2P1	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P2	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P3	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P7	79093040	0RH2202C622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 16 W 1608 5.00% D
R2P8	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R2P9	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R2Q1	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2R1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2R2	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R301	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R302	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R303	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R304	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R305	79096367	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R306	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R307	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R308	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R309	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R310	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R311	79096360	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R312	79096362	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R313	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R315	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R317	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R318	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R319	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R581	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R582	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R583	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R586	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R587	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R588	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R589	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R590	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R591	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R592	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R593	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R594	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R595	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R596	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R597	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
X502	79096458	6202R1143DC	CRYSTAL,STANDARD, KJE H49U 14.31818HZ 25PPMPPM 12PFPF BK
ZD101	79096313	0DZ330009BF	DIODE,ZENER, GDZJ3.3B TP GRANDE D
ZD103	79096312	0DZ130009AA	DIODE,ZENERS, MTZ13A TP ROHM - - - - -
ZD501	79096014	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -
ZD502	79096014	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -
ZD751	79096311	0DZ102609BB	DIODE,ZENER, UZ-10BSB 26MM TP PYU
ZD752	79096317	0DZ562609AB	DIODE,ZENER, MTZ5.6C,0.5W(52MM) TP ROHM
R539	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R540	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R541	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R542	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R543	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R544	79096346	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R545	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R546	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R547	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R548	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R550	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R553	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R554	79096347	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R555	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R556	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R557	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R558	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R563	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R564	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R566	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R569	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R570	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R571	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R575	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R576	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R577	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R578	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R579	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R580	79096349	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R320	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R321	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R322	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R323	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R324	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R325	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R326	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R327	79096370	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R328	79096350	0RH1501D622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 10 W 2012 5.00% D
R331	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R332	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R333	79096348	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R335	79096372	0RH8201D622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 10 W 2012 5.00% D
R336	79096349	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R616	79098762	0RD3301F608	RESISTOR,FIXED CARBON FILM, 3.3K OHM 1/6 W 5.00% TA26
R617	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R618	79096340	0RD2701F608	RESISTOR,FIXED CARBON FILM, 2.7K OHM 1/6 W 5.00% TA26
R619	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R625	79096343	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R626	79096373	0RH8202D622	RESISTOR,METAL GLAZED(CHIP), 82K OHM 1 / 10 W 2012 5.00% D
R627	79096373	0RH8202D622	RESISTOR,METAL GLAZED(CHIP), 82K OHM 1 / 10 W 2012 5.00% D
R628	79096343	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R630	79096337	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R631	79096337	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R633	79098764	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R641	79098759	0RD0752F608	RESISTOR,FIXED CARBON FILM, 75 OHM 1/6 W 5.00% TA26
R702	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R703	79096362	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R706	79096369	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R337	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R338	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R339	79096354	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R340	79096350	0RH1501D622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 10 W 2012 5.00% D
R341	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R342	79096364	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R344	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R345	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R346	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R348	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R349	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R364	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R365	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R366	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R367	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R842	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R843	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R844	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R845	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R851	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R856	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R857	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R858	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R866	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R867	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R874	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
RC601	79096471	6712R0838GA	REMOTE CONTROLLER RECEIVER, TSOP1238UQ1 TEMIC 8MM 37.9KHZ
RS501	79096465	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
RS502	79096465	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
SW601	79098797	6600R-SH18A	SWITCH,TACT, CSS-4206 CHANG SHIN
R707	79096369	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R708	79096361	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R711	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R751	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R752	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R801	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R802	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R804	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R805	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R806	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R807	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R808	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R809	79096352	0RH1800D622	RESISTOR,METAL GLAZED(CHIP), 180 OHM 1 / 10 W 2012 5.00% D
R810	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
SW602	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW603	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW604	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW605	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW606	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW607	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW608	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW609	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW610	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW611	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
T101	79096457	6170RNGW12A	TRANSFORMER,SMPS[COI, EER3530 SOOJUNG WIDE
TU701	79096469	6700NFNG04A	TUNER, TCMN0682PA20C(US,SS)
V101	79098795	656-004C	VARISTOR, SVC681D-10A SAMHWA 4.O CUT
X201	79097347	6202R-BM04C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X301	79096459	6202R1357AC	CRYSTAL,STANDARD, X-TAL 3.579575M 15PPM SER KJE
X501	79097346	6202R-BL06C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
R368	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R369	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R3F1	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R3F2	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R3F3	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R3F4	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R3F5	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R401	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R403	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R404	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R405	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R406	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R407	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R409	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R410	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R811	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R812	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R813	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R814	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R817	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R818	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R821	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R822	79096346	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R823	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R835	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R836	79096364	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R837	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R838	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R839	79096363	0RH3902D622	RESISTOR,METAL GLAZED(CHIP), 39K OHM 1 / 10 W 2012 5.00% D
R840	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R411	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R412	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R413	79096480	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R414	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R415	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R416	79096480	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R417	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R418	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R419	79093041	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R420	79093041	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R428	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R429	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R430	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R431	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R432	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R433	79093046	0RH5600C622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 16 W 1608 5.00% D
R434	79093046	0RH5600C622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 16 W 1608 5.00% D
R435	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R436	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R437	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R438	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R439	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TU

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TU (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case o**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R440	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R441	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R501	79093042	0RH3301C622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 16 W 1608 5.00% D
R502	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R503	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R504	79093033	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R505	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R506	79093028	0RH1001C422	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 1.00% D
R507	79098768	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R508	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R509	79098768	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R510	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R511	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R512	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R514	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R515	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R516	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R517	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R518	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R519	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R520	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R521	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R522	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D

MEMO

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
2	79096436	4680R-B003B	MOTOR(MECH), DRUM VH4301 KUMAGAYA
002A	79096450	5202R00002C	BRUSH,CARBON, ASSY D33 (TIP+2 SPRING) 1.4,
3	79096439	4930R-0284A	HOLDER,SHELF, FPC(6CH)
4	79097553	4930R-0171A	HOLDER, CLAMP
8	79096420	4470R-0047B	GEAR, ASSY RACK (DI)
9	79097011	4470R-0053A	GEAR, MIDDLE
10	79096473	6850R-GK22Z	CABLE,FLAT, P=1.0 FFC UL2896(0.0
11	79096394	3210R-0036A	CHASSIS ASSY, MAIN (DV4510N #1 ; SH)
011A	79096474	6850R-JW14B	CABLE,FLAT, P=1.0 FFC UL2896(0.0
12	79097014	5040R-0047A	RUBBER, REAR(E2,5040H-1054A),YAMAUCHI
012A	79096063	5040R-0047C	RUBBER, DAMPER(HARDNESS=30),
13	79096234	4400R-0006A	BELT, LOADING
14	79096235	4470R-0055A	GEAR, PULLEY
15	79096477	6871RZ5130A	PWB(PCB) ASSEMBLY,OT, SUB,L/D (DP-4V,DVD+V
16	79096421	4470R-0050B	GEAR, ASSY FEED (DI)
17	79096236	4470R-0056A	GEAR, LOADING
18	79096240	4974R-0023A	GUIDE, UP/DOWN
19	79096418	4421R-0008A	BRAKE ASSEMBLY, RS
20	79096446	4970R-0128A	SPRING, COIL D35 (TB)
C108	79096274	0CE336BH638	CAPACITOR,FIXED ELECTROLYTIC, 33UF KME TYPE 25V 20% FM5 TP 5
C109	79096303	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C110	79096279	0CG1020U630	CAPACITOR,SEMI CERAM, 1000PF 400V M E(Z5U)
C111	79096148	0CG2220U630	CAPACITOR,SEMI CERAMIC, 2200PF D 400V 20% E(Z5U) R
C121	79092005	0CE2276F638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 16V 20% FM5 TP 5
C123	79092010	0CE477BH630	CAPACITOR,FIXED ELECTROLYTIC, 470UF KME TYPE 25V 20% FM5 BULK
C126	79096270	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 25V 20% FM5 TP 5
C127	79092003	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC, 1000UF KME TYPE 16V 20% FM5 BULK
C128	79092007	0CE3376D638	CAPACITOR,FIXED ELECTROLYTIC, 330UF SMS,SG 10V 20% FM5 TP 5
C129	79096271	0CE228BF630	CAPACITOR,FIXED ELECTROLYTIC, 2200UF KME TYPE 16V 20% FM5 BULK
C130	79092035	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C131	79096460	624-082H	CAPACITOR,FIXED ELECTROLYTIC, CE 1000UF/10V SHL(10*12.5)T/P
C132	79092035	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C133	79098731	0CQ1042K409	CAPACITOR,FIXED FILM, 0.1UF S 50V 5% PE TP5
21	79096416	4421R-0006A	BRAKE ASSY, T
22	79096466	6520D00001A	HEAD(CIRC), D35 FE TDK FE HEAD
23	79096388	3040R-0057A	BASE, LOADING
24	79096412	4261R-0029A	ARM ASSEMBLY, IDLER (N)
26	79097326	3390R-0005A	TRAY, DISC
28	79096415	4408R-0004A	REEL, T
29	79096410	4261R-0019A	ARM ASSY, PINCH
30	79096432	4510R-0043A	LEVER, T/UP
31	79096444	4970R-0123A	SPRING, COIL TENSION(D35)
51	79096414	4400R-0005A	BELT, CAPSTAN
52	79096435	4680R-A006A	MOTOR(MECH), CAPSTAN MCVC-035AA L
052A	79096449	4980R-0023A	SUPPORTER, CAPSTAN(D35)
54	79096425	4470R-0100A	GEAR, RACK F/L
054A	79096445	4970R-0124B	SPRING, COIL D35 (RACK F/L)
55	79096423	4470R-0097A	GEAR, DRIVE(D35)

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
56	79096422	4470R-0096A	GEAR, CAM(D35)
58	79096417	4421R-0007A	BRAKE ASSY, CAPSTAN
60	79096429	4510R-0040A	LEVER, F/R(D35)
61	79096413	4265R-0006A	CLUTCH ASSEMBLY, D35 (N)
64	79096424	4470R-0098A	GEAR, SECTOR(D35)
76	79096434	4510R-0047A	LEVER, SPRING
77	79096396	3300R-M116A	PLATE, SLIDER
78	79096430	4510R-0041A	LEVER, TENSION
79	79096387	3040R-0056A	BASE, TENSION(D35)
100	79096400	3301R-M022A	PLATE ASSEMBLY, TOP
100A	79096395	3300R-0184A	PLATE, GND
100B	79096397	3300R-M118A	PLATE, TOP(D35)
102	79096447	4970R-0130A	SPRING, COIL D35 (STOPPER)
109	79096455	5870R-0004A	OPENER, DOOR
115	79096431	4510R-0042A	LEVER, SWITCH
116	79096448	4970R-0138A	SPRING, COIL D35 SWITCH
117	79096398	3300R-M137A	PLATE, SPRING CST
250	79096391	3110R-V004A	CASE, TOP(COMBI-2) PRESS (
274	79096399	3300R-V032A	PLATE, VB602M PRESS SUS 0.2
276	79096440	4930R-0298B	HOLDER,SHELF, TIMER PWB(D+V-RIB CU
283	79096405	3580R-V054A	DOOR,CASE, CST (VCR) TOSHIBA CO
284	79096419	442-681A	SPRING, DOOR
285	79096404	3580R-T084A	DOOR,CASE, TRAY (TOSHIBA COMBI)
300	79096464	6410RAHP02D	POWER CORD, HIT-110/NISPT-2X18AW
323	79096392	3111R-0089B	CASE ASSY, PRE-AMP (PBSB-SH)
C151	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C152	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C153	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C154	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C155	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C159	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C161	79096276	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C163	79096461	624-087H	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 220PF/1KV CERAMIC
C201	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C202	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C203	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C204	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C205	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
330	79096393	3140R-V001A	CHASSIS, COMBI-2 PRESS
401	79096380	1MEC0261518	SCREW MACHINE,PAN HE, #NAME?
402	79096382	1MPC0261418	SCREW MACHINE,PAN HEAD, #NAME?
405	79096383	1SZZR-0031B	SCREW,DRAWING, + 1 D2.6 L5.8 SWRCH1
406	79096381	1MEC0302018	SCREW MACHINE,PAN HEAD SPR W, #NAME?
409	79096384	1SZZR-0032B	SCREW,DRAWING, + 1 D2.6 L5.0 SWRCH1

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
410	79096379	1APF0262218	SCREW TAP TITE(B),PAN HEAD, #NAME?
429	79096221	1SZZR-0012A	SCREW,DRAWING, B-TITE
430	79097901	1SZZH-1003A	SCREW,DRAWING, + D2.0 6MM SWRCH16A/NIY 4.5MM 1.5MM MACHINE PAN PL
431	79096220	1SZZH-1007B	SCREW,DRAWING, + D2.0 6MM SWRCH16A/ZNBK 4MM 1.2MM TAPPING PAN NO
432	79097902	1SZZR-0011A	SCREW,DRAWING, MACHINE
452	79097905	353-051A	SCREW,DRAWING, SPECIAL
457	79097907	353-051E	SCREW,DRAWING, SPECIAL (3X12)
465	79097903	353-046K	SCREW,DRAWING, SPECIAL (3X10 B.K)
467	79096043	353-051G	SCREW,DRAWING, + 2 D3.0 L8.0 MSWR3/
517	79096386	1WZZR-0004D	WASHER,DRAWING, STOPPER
518	79096385	1WZZR-0004A	WASHER,DRAWING, STOPPER
801	79096483	3835RM0056E	INSTRUCTION ASSEMBLY, VCR VB602M.NA1CTT TO
802	79096482	3890R-H529U	BOX, VB602M NA1CTT SWM3-A
803	79096409	3920R-E064A	PACKING,CASING, DC69_S 0.02 200 EPS
806	79096472	6850R-CAA22	CABLE,COAXIAL, 1200M/M NTSC-NTSC DO
808	79096451	534-008C	BATTERY,MN, AAAM(R03) 1.5V 1PAIR(LOCAL)
810	79096475	6851RN0006L	CABLE ASSY,RF, CABLE ASSY,RF/RCA US
811	79096073	6611R1G001A	PLUG ASSY, 1WAY YELLOW GLOBAL
812	79096074	6611R2G001A	PLUG ASSY, 2WAY RED/WHITE GLOBA
900	79096470	6711R2N080A	REMOTE CONTROLLER AS, TOSHIBA VB602M DVD+
A01	79096438	4861R-0015A	CLAMP ASSEMBLY, DISC(DP-5) DI
A02	79096389	3041R-M004A	BASE ASSEMBLY, MAIN (DP4) DI-IDECK
A03	79096390	3041R-M005A	BASE ASSEMBLY, SLED (DP5) DI
A04	79096437	4811RF0038A	BRACKET ASSEMBLY, L/D(S)
A11	79096427	4471R-0005A	GEAR ASSY, P3
A12	79096426	4471R-0004A	GEAR ASSY, P2
A21	79096442	4931R-0047A	HOLDER ASSY, CST
A22	79096428	4471R-0006A	GEAR ASSY, RACK F/L
A23	79096411	4261R-0023A	ARM ASSY, F/L
A24	79096433	4510R-0046A	LEVER, ASSY SWITCH
A42	79096402	3501R-6412A	BOARD ASSEMBLY, VCR VB602M KEY
A43	79096406	3721R-F324A	PANEL ASSEMBLY,FRONT, VB602M NA1UTT
A46	79096403	3501R-8310A	BOARD ASSEMBLY, VCR VB602M MAIN
A46A	79096481	6885R-1010C	SUB PWB(PCB) ASSEMBL, 4341004E100500 FF 0
A48	79096476	6871R-8311A	PWB(PCB) ASSEMBLY,TO, VB602M NA1UTT POWER
A49	79096401	3501R-6411A	BOARD ASSEMBLY, VCR VB602M TIMER
BD01	79091008	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD02	79091008	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD101	79096005	0DD160000DA	DIODE,RECTIFIERS, S1WBA60 BK SHINDENGEN - 600V - - - -
C101	79096244	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C102	79096244	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C103	79092004	0CE157CR610	CAPACITOR,FIXED ELECTROLYTIC, 150UF SHL,SD 250V 20% FL BULK
C105	79092033	0CQ1031Y519	CAPACITOR,FIXED FILM, 0.01UF D 630V 10% PE NI TP5
C106	79092036	624-087B	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 100P/1KV SMPS SAMHWA
C107	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C578	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C579	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C580	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C581	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C582	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C583	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C584	79096276	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C585	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C586	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C588	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C589	79096295	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C590	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C592	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C593	79096300	0CH4471K416	CAPACITOR,FIXED CERAMIC(High dielectric), 470PF 50V 5% NP0 2012 R/TP
C594	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C595	79096326	0CH4120K416	CAPACITOR,FIXED CERAMIC(High dielectric), 12PF 50V 5% NP0 2012 R/TP
C596	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C597	79096302	0CH4681K416	CAPACITOR,FIXED CERAMIC(High dielectric), 680PF 50V 5% NP0 2012 R/TP
C598	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C599	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C5L1	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C601	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C602	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C603	79096303	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C604	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C606	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C206	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C207	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C208	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C209	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C210	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C211	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C212	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C213	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C214	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**
CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC
FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)
DESTINATION : <AN, 60>
PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")
PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C215	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C216	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C224	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C225	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C401	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C402	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C403	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C404	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C405	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C406	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C408	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C409	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C410	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C411	79096022	0CH1102K512	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 1608 R/TP
C412	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C413	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C414	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C415	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2A8	79098716	0CH1152K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% X7R(X) 1608 R/TP
C2A9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2B3	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C2B4	79098719	0CH1683F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.068UF 16V 80%,-20% Y5V(F) 1608 R/TP
C2B5	79092019	0CH1333K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 1608 R/TP
C2B9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2C1	79092013	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% X7R(X) 1608 R/TP
C2C2	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2C4	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2C5	79098717	0CH1332K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3300PF 50V 10% X7R(X) 1608 R/TP
C2C6	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2C8	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2C9	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C226	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C229	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C230	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C231	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C232	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C238	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C239	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C240	79092016	0CH1222K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2200PF 50V 10% X7R(X) 1608 R/TP
C242	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C245	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C251	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C252	79092023	0CH4100K112	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 0.5 pF NP0 1608 R/TP
C253	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C330	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C331	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C332	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C333	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C334	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C335	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C336	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C337	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C338	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C339	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C340	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C341	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C342	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C343	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C503	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C504	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C505	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C506	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C507	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**
CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC
FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)
DESTINATION : <AN, 60>
PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")
PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C508	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C509	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C510	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C511	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C512	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C513	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C514	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C515	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C254	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C255	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C258	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C261	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C262	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C263	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C264	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C265	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C272	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C273	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C274	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C277	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C278	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2D0	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D1	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D2	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2D3	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2D4	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D5	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2D6	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2D7	79098716	0CH1152K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% X7R(X) 1608 R/TP
C2D9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2E1	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2E2	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C2E3	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2E4	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C344	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C346	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C347	79096290	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C348	79096290	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C349	79096288	0CH1333K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 2012 R/TP
C350	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C351	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C354	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C355	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C360	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C3F1	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C3F2	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C3F3	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C279	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C280	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C281	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C282	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C284	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C285	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C286	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C287	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C288	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C289	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C290	79098720	0CH4180K412	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 1608 R/TP
C291	79098720	0CH4180K412	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 1608 R/TP
C292	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C544	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C545	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C546	79096277	0CE4764H638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 25V 20% FM5 TP 5
C549	79092025	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C550	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C551	79096287	0CH1333H516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 25V 10% B(5YP) 2012 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C552	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C553	79092025	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C554	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C555	79097121	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C556	79097121	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C557	79098721	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C558	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C315	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C316	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C317	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C318	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C319	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C320	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C321	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C322	79096292	0CH4101K416	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 2012 R/TP
C323	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C324	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C325	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C327	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C328	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C329	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2M1	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C2M2	79092022	0CH1682K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% X7R(X) 1608 R/TP
C2M3	79092020	0CH1472K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% X7R(X) 1608 R/TP
C2M4	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M5	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M6	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M7	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M8	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N1	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N3	79092017	0CH1223K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N4	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C301	79096304	0CQ2232L559	CAPACITOR,FIXED FILM, 0.022UF S 63V 10% PP NI TP5
C293	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C294	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C295	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C296	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C297	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C298	79092008	0CE4774C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 6.3V 20% FM5 TP 5
C299	79092024	0CH4220K412	CAPACITOR,FIXED CERAMIC(High dielectric), 22PF 50V 5% NP0 1608 R/TP
C2A0	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2A3	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2A4	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2A5	79098719	0CH1683F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.068UF 16V 80%,-20% Y5V(F) 1608 R/TP
C2A6	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2A7	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C416	79096022	0CH1102K512	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 1608 R/TP
C417	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C418	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C419	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C420	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C421	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C422	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C423	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C424	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C425	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C500	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C501	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C502	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C302	79096278	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C303	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C304	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C305	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C306	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C307	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C308	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C309	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C310	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C311	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C312	79096273	0CE3364F638	CAPACITOR,FIXED ELECTROLYTIC, 33UF SRA,SS 16V 20% FM5 TP 5
C313	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C314	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
L512	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L601	79096336	0LR8200J025	INDUCTOR,RADIAL LEAD, 820UH 5% TP 4 X 5 TR5 -
L602	79096332	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L603	79096332	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L706	79096333	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L822	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
LD501	79096441	4931R-0017C	HOLDER ASSY, LED(DI-CKD)LOCAL
LED601	79096306	0DL112000AK	LED, DL-11S2GNS(SUPPER,GREEN,03)KOC
LED602	79096307	0DL342009DA	LED, SLR-342YY TP ROHM YE
MS501	79096467	6600JB8005B	SWITCH,MODE, NON 5V 1MA VERTICAL
Q156	79097535	0TR320509AB	TRANSISTOR,BIPOLARS, KTC3205-TP-Y (KTC2236A)KEC
Q160	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q161	79097532	0TR126809BA	TRANSISTOR,BIPOLARS, KTA1268-BL TP KEC - -
Q162	79096377	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q2A1	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q2A2	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
C559	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C560	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C561	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C566	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C567	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C568	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C569	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C570	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C571	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C572	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C573	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C574	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C577	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C516	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C517	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C518	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C519	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C520	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C521	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C522	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C523	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C525	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C526	79096278	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C527	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C528	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C883	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C884	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C885	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C886	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C887	79096272	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC, 3.3UF SRA,SS 50V 20% FM5 TP 5
C888	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C889	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
CS501	79096468	6600M000002	SWITCH,PUSH, MPU11810MLB0 MIC DC
D101	79096002	0DD010009CA	DIODE,RECTIFIERS, EG01C TP SANKEN - - - - - -
D102	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D107	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D108	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D110	79096308	0DR302000AB	DIODE,RECTIFIERS, HER302 BK RECTRON DO201AD 100V 3A 200A 50SEC -
D111	79096009	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
C529	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C530	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C531	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C532	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C533	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C534	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C535	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C536	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C538	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C540	79092024	0CH4220K412	CAPACITOR,FIXED CERAMIC(High dielectric), 22PF 50V 5% NP0 1608 R/TP
C541	79098721	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C542	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C543	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C607	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C608	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C609	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C610	79096268	0CE1074C638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 6.3V 20% FM5 TP 5
C611	79097123	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C612	79097123	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C613	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C614	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C701	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C702	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C703	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C704	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C706	79096298	0CH4300K416	CAPACITOR,FIXED CERAMIC(High dielectric), 30PF 50V 5% NP0 2012 R/TP
IC2M1	79097140	0IFA303200A	IC,FAIRCHILD, KA3032 48QFP BK 5CH MOTOR DRIVER
IC301	79096024	0ICTMHY011A	IC,CUSTOMIZED, HS353106 HYNIX 100 T
IC302	79096321	0IJR223400D	IC,JRC, NJM2234L SIP8 ST S/W IC(3INPUT,1OUTPUT)
IC305	79094008	0IHY576532A	IC,HYUNDAI, HY57V653220CTC-7 86P
IC3F1	79097149	0IMMRFU001B	IC,MEMORIES, MBM29LV800BA-90PFTN
IC3F1A	79096479	6957R-254AB	PROGRAM, VB602M EVNT DVD PROG
IC401	79098755	0IPRPCI003B	IC,PERIPHERALS, CS4391-KZR CIRRUS LO
IC402	79098737	0IJR458000B	IC,JRC, NJM4580M 8,DMP8 TP OP AMP 2K/REEL
IC501	79098747	0INS860200A	IC,NATIONAL SEMICOND, NDV8602 240 VQFP BK
IC502	79098744	0IMMRAL012A	IC,MEMORIES, AT93C56-10SC-2.7-8S1
IC503	79096319	0IAL241600B	IC,ATMEL, AT24C16 - - - -
IC504	79096322	0IKE703100A	IC,KEC, KIA7031P 3P 3.1V RESET(TAPING) - - - -
IC505	79098739	0IKE704200B	IC,KEC, KIA7042P(AT) TO-92 4.2V RESET - - - -
IC506	79096327	0IPMGA7001A	IC,POWER MANAGEMENT, AMC1117-1.8SJ ADD MI
IC601	79096331	0IPRPNE001A	IC,PERIPHERALS, UPD16315GB-3BS NEC 4
IC602	79096330	0IPRPMT006A	IC,PERIPHERALS, MM1225XFBE MITSUMI 8
C707	79096298	0CH4300K416	CAPACITOR,FIXED CERAMIC(High dielectric), 30PF 50V 5% NP0 2012 R/TP
C708	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C731	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C751	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C752	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C801	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C803	79096280	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C804	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C806	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C807	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C808	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C816	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C821	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C822	79096285	0CH1222K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2200PF 50V 10% B(5YP) 2012 R/TP
L302	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L303	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L305	79096333	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L3F1	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L501	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L502	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L503	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L504	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L505	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L506	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L507	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L508	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L509	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L510	79096335	0LR0682K035	INDUCTOR,RADIAL LEAD, 68UH 10% TP 6 X 6 TR5 -
L511	79096334	0LR0221J0N5	INDUCTOR,RADIAL LEAD, 2.2UH 5% TP 3X5 TR5
C823	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C825	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C826	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C827	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C828	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C829	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C830	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C831	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C832	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C833	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C834	79096289	0CH1472K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% B(5YP) 2012 R/TP
C836	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C838	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
D112	79096009	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
D113	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D114	79096008	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D115	79096008	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D121	79096305	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
D201	79096309	0DR495009AA	DIODE,RECTIFIERS, RB495D TP ROHM SMD 40V 400A 2A - 70UA
D2A1	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D2A2	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D2A3	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D401	79096310	0DSRM00118A	DIODE,SWITCHING, DAP202K T146 ROHM R/
D802	79096305	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
DG601	79096462	6302R-V128A	DIGITRON, 11-MT-139GK FUTABA S
ES501	79096443	4931R-0050C	HOLDER ASSEMBLY, END (DI)
ES502	79096443	4931R-0050C	HOLDER ASSEMBLY, END (DI)
F101	79096318	0FS1601B51B	FUSE,SLOW BLOW, 1600MA 250 V 5.2X20
IC801	79096324	0ILNRSA013A	IC,LINEAR, LA72670M-MPB SANYO 8
J802	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
JK601	79096454	572-034K	JACK,RCA, BJP-303S-04(YL),AU-PLATED
JK602	79096453	572-034J	JACK,RCA, BJP-303S-03(WH),AU-PLATED
JK603	79096452	572-034H	JACK,RCA, BJP-303S-02(RED),AU-PLATED
L102	79096456	616-145G	FILTER(CIRC), SHT LFSQ2215V4-04220
L122	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L123	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L124	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L201	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L206	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L207	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L208	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L2A1	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L2A2	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L301	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
C839	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C840	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C841	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C842	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C843	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C844	79096289	0CH1472K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% B(5YP) 2012 R/TP
C845	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C846	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C847	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C848	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C849	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C851	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C853	79096280	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
F102	79097595	GIRH200000B	IC,ROHM, ICP-N20 T104 TP IC D
F601	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
F602	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
F603	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
FL301	79096463	633-032K	COIL,CAN, BIAC OSC,1CHIP 5V(KS-75M)
IC101	79096329	0IPMGFF001A	IC,POWER MANAGEMENT, ICE2B265 INFINEON 8
IC102	79094030	657-063A	SENSOR, LTV-817B,PHOTO COUPLER(LITEON)
IC103	79094010	0IKE431000A	IC,KEC, KIA431 - - - -
IC151	79098753	0IPMGKE008B	IC,POWER MANAGEMENT, KIA78R08PI CU KEC 4P
IC152	79096328	0IPMGFA046A	IC,POWER MANAGEMENT, KA278R33TSTU FAIRCHI
IC201	79098742	0ILNRHY002B	IC,LINEAR, HDC25D811B HYUNDAI 2
IC203	79097518	0IEB121616B	IC,ELITE MEMORY TECH, M12L16161A-7T-L 50PI
IC206	79094027	GITO704000F	IC,TOSHIBA, TC7W04FU
IC2A1	79098741	0ILNRHI003A	IC,LINEAR, HD153702TF HITACHI 6
IC2A2	79094009	0IJR341400C	IC,JRC, NJM3414AM-TE1,3K/REEL. JRC - - - -
IC2A4	79098738	0IKE393000G	IC,KEC, KIA393F-EL FLP-8 TP DUAL COMPARATOR =(NJM2903M)
C854	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C866	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C871	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C872	79096301	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C873	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C874	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C875	79096288	0CH1333K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 2012 R/TP
C876	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C877	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C878	79096301	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C879	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C880	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C881	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C882	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
R204	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R207	79093030	0RH1004C622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 16 W 1608 5.00% D
R217	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R218	79093044	0RH4700C622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 16 W 1608 5.00% D
R219	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R220	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R230	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R231	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R232	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R233	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R234	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R235	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R236	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R237	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R554	79096347	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R555	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R556	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R557	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R558	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R563	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R564	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R566	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R569	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R570	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R571	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R575	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R576	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R577	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R154	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R155	79096338	0RD1802F608	RESISTOR,FIXED CARBON FILM, 18K OHM 1/6 W 5.00% TA26
R156	79093005	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R157	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R158	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R159	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R163	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R164	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R167	79096028	0RD0471F608	RESISTOR,FIXED CARBON FILM, 4.7 OHM 1/6 W 5.00% TA26
R168	79096028	0RD0471F608	RESISTOR,FIXED CARBON FILM, 4.7 OHM 1/6 W 5.00% TA26
R170	79093005	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R171	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R201	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R202	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R203	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
Q2A5	79098781	0TR388209AA	TRANSISTOR,BIPOLARS, CHIP KTC3882 SOT-23
Q2A6	79098781	0TR388209AA	TRANSISTOR,BIPOLARS, CHIP KTC3882 SOT-23
Q2M1	79098777	0TR124009AP	TRANSISTOR,BIPOLARS, DTC124EK TP ROHM KOREA SOT23 3K/R
Q301	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q302	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q303	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q304	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q305	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q306	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q307	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q308	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q309	79095001	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q310	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q401	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q404	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
R2P3	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P7	79093040	0RH2202C622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 16 W 1608 5.00% D
R2P8	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R2P9	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R2Q1	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2R1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2R2	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R301	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R302	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R303	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R304	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R305	79096367	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R306	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R307	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M9	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2N0	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2N1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N2	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2N3	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2N4	79093035	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R2N5	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2N6	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N7	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N8	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2N9	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P0	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R2P1	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P2	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
Q405	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q501	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q503	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q504	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q505	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q506	79095001	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q507	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q601	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q602	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q701	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q702	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q805	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
R100	79093009	0RD1504H632	RESISTOR,FIXED CARBON FILM, 1.5M OHM 1/2 W 5.00% MF10
R101	79093056	614-007A	RESISTOR,FIXED CEMENT, 2.7/2W CEMENT SMPS V
R104	79093055	0RS5602K619	RESISTOR,FIXED METAL OXIDE FILM, 56K OHM 2 W 5.00% TR
R239	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R240	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R241	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R242	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R243	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R252	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R269	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R273	79093034	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R274	79093048	0RH6200C622	RESISTOR,METAL GLAZED(CHIP), 620 OHM 1 / 16 W 1608 5.00% D
R275	79093034	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R276	79093052	0RH9100C622	RESISTOR,METAL GLAZED(CHIP), 910 OHM 1 / 16 W 1608 5.00% D
R277	79093057	0RH1500C622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 16 W 1608 5.00% D
R278	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R279	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R105	79093001	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R106	79093001	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R107	79096376	0RS0350K619	RESISTOR,FIXED METAL OXIDE FILM, 0.35 OHM 2 W 5.00% TR
R111	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R112	79093011	0RD2200F608	RESISTOR,FIXED CARBON FILM, 220 OHM 1/6 W 5.00% TA26
R113	79098761	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R114	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R115	79096375	0RN3301F408	RESISTOR,FIXED METAL FILM, 3.3K OHM 1/6 W 1.00% TA26
R116	79096374	0RN2701F408	RESISTOR,FIXED METAL FILM, 2.7K OHM 1/6 W 1.00% TA26
R117	79096339	0RD2700F608	RESISTOR,FIXED CARBON FILM, 270 OHM 1/6 W 5.00% TA26
R118	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R119	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R131	79093012	0RD2203F608	RESISTOR,FIXED CARBON FILM, 220K OHM 1/6 W 5.00% TA26
R132	79093012	0RD2203F608	RESISTOR,FIXED CARBON FILM, 220K OHM 1/6 W 5.00% TA26
R153	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R2D4	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D5	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R2D6	79093026	0RH0912C622	RESISTOR,METAL GLAZED(CHIP), 91 OHM 1 / 16 W 1608 5.00% D
R2E6	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2E7	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2E8	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2F1	79098771	0RH2200C622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 16 W 1608 5.00% D
R2F2	79098771	0RH2200C622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 16 W 1608 5.00% D
R2F3	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2F4	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2F5	79098772	0RH2202C422	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 16 W 1608 1.00% D
R2F6	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2F7	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2F8	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R324	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R325	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R326	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R327	79096370	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R328	79096350	0RH1501D622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 10 W 2012 5.00% D
R331	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R332	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R333	79096348	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R335	79096372	0RH8201D622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 10 W 2012 5.00% D
R336	79096349	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R337	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R338	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R339	79096354	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R340	79096350	0RH1501D622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 10 W 2012 5.00% D
R308	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R309	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R310	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R311	79096360	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R312	79096362	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R313	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R315	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R317	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R318	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R319	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R320	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R321	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R322	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R323	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R281	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R290	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R291	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R292	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2A1	79093026	0RH0912C622	RESISTOR,METAL GLAZED(CHIP), 91 OHM 1 / 16 W 1608 5.00% D
R2A2	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2A6	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2A9	79098774	0RH5602C622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 16 W 1608 5.00% D
R2B0	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B2	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B3	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B4	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2B5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R3F2	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R3F3	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R3F4	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R3F5	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R401	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R403	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R404	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R405	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R406	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R407	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R409	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R410	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R411	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R412	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R2F9	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G1	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G2	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G3	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2G4	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2G7	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2G9	79093057	0RH1500C622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 16 W 1608 5.00% D
R2M1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M2	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2M3	79093051	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R2M5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M6	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2M7	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R2M8	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R341	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R342	79096364	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R344	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R345	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R346	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R348	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R349	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R364	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R365	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R366	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R367	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R368	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R369	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R3F1	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2B6	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B7	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B8	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2C0	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C4	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2C5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2C6	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C7	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C8	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C9	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D0	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D1	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2D2	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2D3	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R858	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R866	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R867	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R874	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
RC601	79096471	6712R0838GA	REMOTE CONTROLLER RECEIVER, TSOP1238UQ1 TEMIC 8MM 37.9KHZ
RS501	79096465	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
RS502	79096465	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
SW601	79098797	6600R-SH18A	SWITCH,TACT, CSS-4206 CHANG SHIN
SW602	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW603	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW604	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW605	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW606	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW607	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW608	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
R537	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R538	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R539	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R540	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R541	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R542	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R543	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R544	79096346	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R545	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R546	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R547	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R548	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R550	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R553	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R413	79096480	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R414	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R415	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R416	79096480	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R417	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R418	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R419	79093041	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R420	79093041	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R428	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R429	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R430	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R431	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R432	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R433	79093046	0RH5600C622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 16 W 1608 5.00% D
R578	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R579	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R580	79096349	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R581	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R582	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R583	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R586	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R587	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R588	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R589	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R590	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R591	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R592	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R593	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R507	79098768	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R508	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R509	79098768	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R510	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R511	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R512	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R514	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R515	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R516	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R517	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R518	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R519	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R520	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R521	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R434	79093046	0RH5600C622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 16 W 1608 5.00% D
R435	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R436	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R437	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R438	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R439	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R440	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R441	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R501	79093042	0RH3301C622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 16 W 1608 5.00% D
R502	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R503	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R504	79093033	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R505	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R506	79093028	0RH1001C422	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 1.00% D
R522	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R523	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R524	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R525	79091002	0LC0233002B	INDUCTOR,CHIP, HB-1S1608-800JT CERA
R526	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R528	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R529	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R530	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R531	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R532	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R533	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R534	79093049	0RH6800C622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 16 W 1608 5.00% D
R535	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R536	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R805	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R806	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R807	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R808	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R809	79096352	0RH1800D622	RESISTOR,METAL GLAZED(CHIP), 180 OHM 1 / 10 W 2012 5.00% D
R810	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R811	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R812	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R813	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R814	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R817	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R818	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R821	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R822	79096346	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R594	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R595	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R596	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R597	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R598	79096348	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R599	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C6	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R601	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R602	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R603	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R604	79096341	0RD5602F608	RESISTOR,FIXED CARBON FILM, 56K OHM 1/6 W 5.00% TA26
R605	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R608	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R610	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
SW609	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW610	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW611	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
T101	79096457	6170RNGW12A	TRANSFORMER,SMPS[COI, EER3530 SOOJUNG WIDE
TU701	79096469	6700NFNG04A	TUNER, TCMN0682PA20C(US,SS)
V101	79098795	656-004C	VARISTOR, SVC681D-10A SAMHWA 4.O CUT
X201	79097347	6202R-BM04C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X301	79096459	6202R1357AC	CRYSTAL,STANDARD, X-TAL 3.579575M 15PPM SER KJE
X501	79097346	6202R-BL06C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X502	79096458	6202R1143DC	CRYSTAL,STANDARD, KJE H49U 14.31818HZ 25PPMPPM 12PFPF BK
ZD101	79096313	0DZ330009BF	DIODE,ZENER, GDZJ3.3B TP GRANDE D
ZD103	79096312	0DZ130009AA	DIODE,ZENERS, MTZ13A TP ROHM - - - - -
ZD501	79096014	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -
ZD502	79096014	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -
ZD751	79096311	0DZ102609BB	DIODE,ZENER, UZ-10BSB 26MM TP PYU
ZD752	79096317	0DZ562609AB	DIODE,ZENER, MTZ5.6C,0.5W(52MM) TP ROHM
R611	79096342	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R612	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R613	79093007	0RD1201F608	RESISTOR,FIXED CARBON FILM, 1.2K OHM 1/6 W 5.00% TA26
R614	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R615	79098761	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R616	79098762	0RD3301F608	RESISTOR,FIXED CARBON FILM, 3.3K OHM 1/6 W 5.00% TA26
R617	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R618	79096340	0RD2701F608	RESISTOR,FIXED CARBON FILM, 2.7K OHM 1/6 W 5.00% TA26
R619	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R625	79096343	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R626	79096373	0RH8202D622	RESISTOR,METAL GLAZED(CHIP), 82K OHM 1 / 10 W 2012 5.00% D
R627	79096373	0RH8202D622	RESISTOR,METAL GLAZED(CHIP), 82K OHM 1 / 10 W 2012 5.00% D
R628	79096343	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R630	79096337	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R823	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R835	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R836	79096364	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R837	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R838	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R839	79096363	0RH3902D622	RESISTOR,METAL GLAZED(CHIP), 39K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V290-S-TC

FACTORY MODEL NAME : <AN, 25> SD-V290-S-TC (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R840	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R842	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R843	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R844	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R845	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R851	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R856	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R857	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R631	79096337	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R633	79098764	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R641	79098759	0RD0752F608	RESISTOR,FIXED CARBON FILM, 75 OHM 1/6 W 5.00% TA26
R702	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R703	79096362	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R706	79096369	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R707	79096369	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R708	79096361	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R711	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R751	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R752	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R801	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R802	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R804	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D

MEMO

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
2	79096436	4680R-B003B	MOTOR(MECH), DRUM VH4301 KUMAGAYA
002A	79096450	5202R00002C	BRUSH,CARBON, ASSY D33 (TIP+2 SPRING) 1.4,
3	79096439	4930R-0284A	HOLDER,SHELF, FPC(6CH)
4	79097553	4930R-0171A	HOLDER, CLAMP
8	79096420	4470R-0047B	GEAR, ASSY RACK (DI)
9	79097011	4470R-0053A	GEAR, MIDDLE
10	79096473	6850R-GK22Z	CABLE,FLAT, P=1.0 FFC UL2896(0.0
11	79096394	3210R-0036A	CHASSIS ASSY, MAIN (DV4510N #1 ; SH)
011A	79096474	6850R-JW14B	CABLE,FLAT, P=1.0 FFC UL2896(0.0
12	79097014	5040R-0047A	RUBBER, REAR(E2,5040H-1054A),YAMAUCHI
012A	79096063	5040R-0047C	RUBBER, DAMPER(HARDNESS=30),
13	79096234	4400R-0006A	BELT, LOADING
14	79096235	4470R-0055A	GEAR, PULLEY
15	79096477	6871RZ5130A	PWB(PCB) ASSEMBLY,OT, SUB,L/D (DP-4V,DVD+V
16	79096421	4470R-0050B	GEAR, ASSY FEED (DI)
17	79096236	4470R-0056A	GEAR, LOADING
18	79096240	4974R-0023A	GUIDE, UP/DOWN
19	79096418	4421R-0008A	BRAKE ASSEMBLY, RS
20	79096446	4970R-0128A	SPRING, COIL D35 (TB)
21	79096416	4421R-0006A	BRAKE ASSY, T
22	79096466	6520D00001A	HEAD(CIRC), D35 FE TDK FE HEAD
23	79096388	3040R-0057A	BASE, LOADING
24	79096412	4261R-0029A	ARM ASSEMBLY, IDLER (N)
26	79097326	3390R-0005A	TRAY, DISC
28	79096415	4408R-0004A	REEL, T
29	79096410	4261R-0019A	ARM ASSY, PINCH
30	79096432	4510R-0043A	LEVER, T/UP
31	79096444	4970R-0123A	SPRING, COIL TENSION(D35)
51	79096414	4400R-0005A	BELT, CAPSTAN
52	79096435	4680R-A006A	MOTOR(MECH), CAPSTAN MCVC-035AA L
052A	79096449	4980R-0023A	SUPPORTER, CAPSTAN(D35)
54	79096425	4470R-0100A	GEAR, RACK F/L
054A	79096445	4970R-0124B	SPRING, COIL D35 (RACK F/L)
55	79096423	4470R-0097A	GEAR, DRIVE(D35)
56	79096422	4470R-0096A	GEAR, CAM(D35)
58	79096417	4421R-0007A	BRAKE ASSY, CAPSTAN
60	79096429	4510R-0040A	LEVER, F/R(D35)
61	79096413	4265R-0006A	CLUTCH ASSEMBLY, D35 (N)
64	79096424	4470R-0098A	GEAR, SECTOR(D35)
76	79096434	4510R-0047A	LEVER, SPRING
77	79096396	3300R-M116A	PLATE, SLIDER
78	79096430	4510R-0041A	LEVER, TENSION
79	79096387	3040R-0056A	BASE, TENSION(D35)
100	79096400	3301R-M022A	PLATE ASSEMBLY, TOP
100A	79096395	3300R-0184A	PLATE, GND
100B	79096397	3300R-M118A	PLATE, TOP(D35)
102	79096447	4970R-0130A	SPRING, COIL D35 (STOPPER)
109	79096455	5870R-0004A	OPENER, DOOR
115	79096431	4510R-0042A	LEVER, SWITCH
116	79096448	4970R-0138A	SPRING, COIL D35 SWITCH

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
117	79096398	3300R-M137A	PLATE, SPRING CST
250	79096391	3110R-V004A	CASE, TOP(COMBI-2) PRESS (
274	79096399	3300R-V032A	PLATE, VB602M PRESS SUS 0.2
276	79096440	4930R-0298B	HOLDER,SHELF, TIMER PWB(D+V-RIB CU
283	79096405	3580R-V054A	DOOR,CASE, CST (VCR) TOSHIBA CO
284	79096419	442-681A	SPRING, DOOR
285	79096404	3580R-T084A	DOOR,CASE, TRAY (TOSHIBA COMBI)
300	79096464	6410RAHP02D	POWER CORD, HIT-110/NISPT-2X18AW
323	79096392	3111R-0089B	CASE ASSY, PRE-AMP (PBSB-SH)
330	79096393	3140R-V001A	CHASSIS, COMBI-2 PRESS
401	79096380	1MEC0261518	SCREW MACHINE,PAN HE, #NAME?
C338	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C339	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C340	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C341	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C342	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C343	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C344	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C346	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C347	79096290	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C348	79096290	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C349	79096288	0CH1333K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 2012 R/TP
C350	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C351	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C354	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C286	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C287	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C288	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C289	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C290	79098720	0CH4180K412	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 1608 R/TP
C291	79098720	0CH4180K412	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 1608 R/TP
C292	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C293	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C294	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C295	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C296	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C297	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C298	79092008	0CE4774C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 6.3V 20% FM5 TP 5
402	79096382	1MPC0261418	SCREW MACHINE,PAN HEAD, #NAME?
405	79096383	1SZZR-0031B	SCREW,DRAWING, + 1 D2.6 L5.8 SWRCH1
406	79096381	1MEC0302018	SCREW MACHINE,PAN HEAD SPR W, #NAME?
409	79096384	1SZZR-0032B	SCREW,DRAWING, + 1 D2.6 L5.0 SWRCH1
410	79096379	1APF0262218	SCREW TAP TITE(B),PAN HEAD, #NAME?
429	79096221	1SZZR-0012A	SCREW,DRAWING, B-TITE
430	79097901	1SZZH-1003A	SCREW,DRAWING, + D2.0 6MM SWRCH16A/NIY 4.5MM 1.5MM MACHINE PAN PL
431	79096220	1SZZH-1007B	SCREW,DRAWING, + D2.0 6MM SWRCH16A/ZNBK 4MM 1.2MM TAPPING PAN NO
432	79097902	1SZZR-0011A	SCREW,DRAWING, MACHINE
452	79097905	353-051A	SCREW,DRAWING, SPECIAL
457	79097907	353-051E	SCREW,DRAWING, SPECIAL (3X12)
465	79097903	353-046K	SCREW,DRAWING, SPECIAL (3X10 B.K)
467	79096043	353-051G	SCREW,DRAWING, + 2 D3.0 L8.0 MSWR3/
517	79096386	1WZZR-0004D	WASHER,DRAWING, STOPPER
518	79096385	1WZZR-0004A	WASHER,DRAWING, STOPPER
801	79096484	3835RM0056D	INSTRUCTION ASSEMBLY, VCR VB603M.NA1UTT DV
802	79096485	3890R-H529W	BOX, VB603M NA1UTT SWM3-A
803	79096409	3920R-E064A	PACKING,CASING, DC69_S 0.02 200 EPS
C2D7	79098716	0CH1152K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% X7R(X) 1608 R/TP
C2D9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2E1	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2E2	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2E3	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2E4	79096155	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C2M1	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C2M2	79092022	0CH1682K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% X7R(X) 1608 R/TP
C2M3	79092020	0CH1472K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% X7R(X) 1608 R/TP
C2M4	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M5	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M6	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M7	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
806	79096472	6850R-CAA22	CABLE,COAXIAL, 1200M/M NTSC-NTSC DO
808	79096451	534-008C	BATTERY,MN, AAAM(R03) 1.5V 1PAIR(LOCAL)
810	79096475	6851RN0006L	CABLE ASSY,RF, CABLE ASSY,RF/RCA US
811	79096073	6611R1G001A	PLUG ASSY, 1WAY YELLOW GLOBAL
812	79096074	6611R2G001A	PLUG ASSY, 2WAY RED/WHITE GLOBA
900	79096470	6711R2N080A	REMOTE CONTROLLER AS, TOSHIBA VB602M DVD+
A01	79096438	4861R-0015A	CLAMP ASSEMBLY, DISC(DP-5) DI
A02	79096389	3041R-M004A	BASE ASSEMBLY, MAIN (DP4) DI-IDECK
A03	79096390	3041R-M005A	BASE ASSEMBLY, SLED (DP5) DI

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
A04	79096437	4811RF0038A	BRACKET ASSEMBLY, L/D(S)
A11	79096427	4471R-0005A	GEAR ASSY, P3
A12	79096426	4471R-0004A	GEAR ASSY, P2
A21	79096442	4931R-0047A	HOLDER ASSY, CST
A22	79096428	4471R-0006A	GEAR ASSY, RACK F/L
A23	79096411	4261R-0023A	ARM ASSY, F/L
A24	79096433	4510R-0046A	LEVER, ASSY SWITCH
A42	79096402	3501R-6412A	BOARD ASSEMBLY, VCR VB602M KEY
A43	79096486	3721R-F324B	PANEL ASSEMBLY,FRONT, VB603M NA1UTT
A46	79096403	3501R-8310A	BOARD ASSEMBLY, VCR VB602M MAIN
A46A	79096487	6885R-1010D	SUB PWB(PCB) ASSEMBL, 5553004E100504 FF 0
A48	79096476	6871R-8311A	PWB(PCB) ASSEMBLY,TO, VB602M NA1UTT POWER
A49	79096401	3501R-6411A	BOARD ASSEMBLY, VCR VB602M TIMER
BD01	79091008	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD02	79091008	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD101	79096005	0DD160000DA	DIODE,RECTIFIERS, S1WBA60 BK SHINDENGEN - 600V - - - -
C101	79096244	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C102	79096244	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C103	79092004	0CE157CR610	CAPACITOR,FIXED ELECTROLYTIC, 150UF SHL,SD 250V 20% FL BULK
C105	79092033	0CQ1031Y519	CAPACITOR,FIXED FILM, 0.01UF D 630V 10% PE NI TP5
C106	79092036	624-087B	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 100P/1KV SMPS SAMHWA
C107	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C108	79096274	0CE336BH638	CAPACITOR,FIXED ELECTROLYTIC, 33UF KME TYPE 25V 20% FM5 TP 5
C109	79096303	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C110	79096279	0CG1020U630	CAPACITOR,SEMI CERAM, 1000PF 400V M E(Z5U)
C111	79096148	0CG2220U630	CAPACITOR,SEMI CERAMIC, 2200PF D 400V 20% E(Z5U) R
C299	79092024	0CH4220K412	CAPACITOR,FIXED CERAMIC(High dielectric), 22PF 50V 5% NP0 1608 R/TP
C2A0	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2A3	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2A4	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2A5	79098719	0CH1683F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.068UF 16V 80%,-20% Y5V(F) 1608 R/TP
C2A6	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2A7	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2A8	79098716	0CH1152K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% X7R(X) 1608 R/TP
C2A9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2B3	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C2B4	79098719	0CH1683F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.068UF 16V 80%,-20% Y5V(F) 1608 R/TP
C2B5	79092019	0CH1333K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 1608 R/TP
C2B9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C704	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C706	79096298	0CH4300K416	CAPACITOR,FIXED CERAMIC(High dielectric), 30PF 50V 5% NP0 2012 R/TP
C707	79096298	0CH4300K416	CAPACITOR,FIXED CERAMIC(High dielectric), 30PF 50V 5% NP0 2012 R/TP
C708	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C731	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C751	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C752	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C801	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C803	79096280	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C804	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C806	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C807	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C808	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C816	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C121	79092005	0CE2276F638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 16V 20% FM5 TP 5
C123	79092010	0CE477BH630	CAPACITOR,FIXED ELECTROLYTIC, 470UF KME TYPE 25V 20% FM5 BULK
C126	79096270	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 25V 20% FM5 TP 5
C127	79092003	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC, 1000UF KME TYPE 16V 20% FM5 BULK
C128	79092007	0CE3376D638	CAPACITOR,FIXED ELECTROLYTIC, 330UF SMS,SG 10V 20% FM5 TP 5
C129	79096271	0CE228BF630	CAPACITOR,FIXED ELECTROLYTIC, 2200UF KME TYPE 16V 20% FM5 BULK
C130	79092035	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C131	79096460	624-082H	CAPACITOR,FIXED ELECTROLYTIC, CE 1000UF/10V SHL(10*12.5)T/P
C132	79092035	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C133	79098731	0CQ1042K409	CAPACITOR,FIXED FILM, 0.1UF S 50V 5% PE TP5
C151	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C152	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C153	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C154	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C155	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C323	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C324	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C325	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C327	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C328	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C329	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C330	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C331	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C332	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C333	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C334	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C335	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C336	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C337	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C512	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C513	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C514	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C515	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C516	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C517	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C518	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C519	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C520	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C521	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C522	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C523	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C525	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C159	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C161	79096276	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C163	79096461	624-087H	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 220PF/1KV CERAMIC
C201	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C202	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C203	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C204	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C205	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C206	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C207	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C208	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C209	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C210	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2C1	79092013	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% X7R(X) 1608 R/TP
C2C2	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C2C4	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2C5	79098717	0CH1332K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3300PF 50V 10% X7R(X) 1608 R/TP
C2C6	79098714	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C2C8	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2C9	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2D0	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D1	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D2	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2D3	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2D4	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C2D5	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C2D6	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M8	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2M9	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N1	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N3	79092017	0CH1223K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 80%,-20% Y5V(F) 1608 R/TP
C2N4	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C301	79096304	0CQ2232L559	CAPACITOR,FIXED FILM, 0.022UF S 63V 10% PP NI TP5
C302	79096278	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C303	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C304	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C305	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C306	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C307	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C308	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C309	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C310	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C311	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C312	79096273	0CE3364F638	CAPACITOR,FIXED ELECTROLYTIC, 33UF SRA,SS 16V 20% FM5 TP 5
C313	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C314	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C315	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C316	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C317	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C318	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C319	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C320	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C321	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C322	79096292	0CH4101K416	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 2012 R/TP
C211	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C212	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C213	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C214	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C215	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C216	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C224	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C225	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C226	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C229	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C230	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C231	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C232	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C355	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C360	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C3F1	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C3F2	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C3F3	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C401	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C402	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C403	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C404	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C405	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C406	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C408	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C409	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C410	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C425	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C500	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C501	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C502	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C503	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C504	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C505	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C506	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C507	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C508	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C509	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C510	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C511	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C238	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C239	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C240	79092016	0CH1222K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2200PF 50V 10% X7R(X) 1608 R/TP
C242	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C245	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C251	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C252	79092023	0CH4100K112	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 0.5 pF NP0 1608 R/TP
C253	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C254	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C255	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C258	79098715	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C261	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C262	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C541	79098721	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C542	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C543	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C544	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C545	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C546	79096277	0CE4764H638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 25V 20% FM5 TP 5
C549	79092025	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C550	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C551	79096287	0CH1333H516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 25V 10% B(5YP) 2012 R/TP
C552	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C553	79092025	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C554	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C555	79097121	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C411	79096022	0CH1102K512	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 1608 R/TP
C412	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C413	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C414	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C415	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C416	79096022	0CH1102K512	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 1608 R/TP
C417	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C418	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C419	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C420	79098718	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C421	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C422	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C423	79098722	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C424	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C263	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C264	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C265	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C272	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C273	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C274	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C277	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C278	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C279	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C280	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C281	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C282	79092014	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C284	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C285	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C526	79096278	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C527	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C528	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C529	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C530	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C531	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C532	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C533	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C534	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C535	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C536	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C538	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C540	79092024	0CH4220K412	CAPACITOR,FIXED CERAMIC(High dielectric), 22PF 50V 5% NP0 1608 R/TP
D113	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D114	79096008	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D115	79096008	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D121	79096305	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D201	79096309	0DR495009AA	DIODE,RECTIFIERS, RB495D TP ROHM SMD 40V 400A 2A - 70UA
D2A1	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D2A2	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D2A3	79096013	0DS202009CA	DIODE,SWITCHING, DAN202K TP ROHM KOREA SOT23 80V - - 4NSEC 0.1UA
D401	79096310	0DSRM00118A	DIODE,SWITCHING, DAP202K T146 ROHM R/
D802	79096305	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
DG601	79096462	6302R-V128A	DIGITRON, 11-MT-139GK FUTABA S
ES501	79096443	4931R-0050C	HOLDER ASSEMBLY, END (DI)
ES502	79096443	4931R-0050C	HOLDER ASSEMBLY, END (DI)
F101	79096318	0FS1601B51B	FUSE,SLOW BLOW, 1600MA 250 V 5.2X20
F102	79097595	GIRH200000B	IC,ROHM, ICP-N20 T104 TP IC D
F601	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
L822	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
LD501	79096441	4931R-0017C	HOLDER ASSY, LED(DI-CKD)LOCAL
LED601	79096306	0DL112000AK	LED, DL-11S2GNS(SUPPER,GREEN,03)KOC
LED602	79096307	0DL342009DA	LED, SLR-342YY TP ROHM YE
MS501	79096467	6600JB8005B	SWITCH,MODE, NON 5V 1MA VERTICAL
Q156	79097535	0TR320509AB	TRANSISTOR,BIPOLARS, KTC3205-TP-Y (KTC2236A)KEC
Q160	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q161	79097532	0TR126809BA	TRANSISTOR,BIPOLARS, KTA1268-BL TP KEC - -
Q162	79096377	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q2A1	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q2A2	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q2A5	79098781	0TR388209AA	TRANSISTOR,BIPOLARS, CHIP KTC3882 SOT-23
Q2A6	79098781	0TR388209AA	TRANSISTOR,BIPOLARS, CHIP KTC3882 SOT-23

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
Q2M1	79098777	0TR124009AP	TRANSISTOR,BIPOLARS, DTC124EK TP ROHM KOREA SOT23 3K/R
Q301	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q302	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
C556	79097121	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C557	79098721	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C558	79096282	0CH1104F942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 16V 80%,-20% Y5V(F) 1608 R/TP
C559	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C560	79092018	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2.2UF 16V 80%,-20% Y5V(F) 3216 R/TP
C561	79097108	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C566	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C567	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C568	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C569	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C570	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C571	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C572	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C573	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C574	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C577	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C578	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C579	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C580	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C581	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C582	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C583	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C584	79096276	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C585	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C586	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C588	79096293	0CH4102K416	CAPACITOR,FIXED CERAMIC(High dielectric), 1000PF 50V 5% NP0 2012 R/TP
C603	79096303	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C604	79098705	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C606	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C607	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C608	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C609	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C610	79096268	0CE1074C638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 6.3V 20% FM5 TP 5
C611	79097123	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C612	79097123	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C613	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C614	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C701	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C702	79098709	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C703	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C589	79096295	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C590	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C592	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C593	79096300	0CH4471K416	CAPACITOR,FIXED CERAMIC(High dielectric), 470PF 50V 5% NP0 2012 R/TP
C594	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C595	79096326	0CH4120K416	CAPACITOR,FIXED CERAMIC(High dielectric), 12PF 50V 5% NP0 2012 R/TP
C596	79096294	0CH4180K416	CAPACITOR,FIXED CERAMIC(High dielectric), 18PF 50V 5% NP0 2012 R/TP
C597	79096302	0CH4681K416	CAPACITOR,FIXED CERAMIC(High dielectric), 680PF 50V 5% NP0 2012 R/TP
C598	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C599	79096286	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C5L1	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C601	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C602	79096020	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C821	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C822	79096285	0CH1222K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 2200PF 50V 10% B(5YP) 2012 R/TP
C823	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C825	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C826	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C827	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C828	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C829	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C830	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C831	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C832	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C833	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C834	79096289	0CH1472K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% B(5YP) 2012 R/TP
C836	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
Q303	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q304	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q305	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q306	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q307	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q308	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q309	79095001	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q310	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
Q401	79095002	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q404	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q405	79096031	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q501	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q503	79095003	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q504	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q505	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
C838	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C839	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C840	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C841	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C842	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C843	79097106	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C844	79096289	0CH1472K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 4700PF 50V 10% B(5YP) 2012 R/TP
C845	79096281	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C846	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C847	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C848	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C849	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C851	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C853	79096280	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
F602	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
F603	79091006	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
FL301	79096463	633-032K	COIL,CAN, BIAC OSC,1CHIP 5V(KS-75M)
IC101	79096329	0IPMGFF001A	IC,POWER MANAGEMENT, ICE2B265 INFINEON 8
IC102	79094030	657-063A	SENSOR, LTV-817B,PHOTO COUPLER(LITEON)
IC103	79094010	0IKE431000A	IC,KEC, KIA431 - - - -
IC151	79098753	0IPMGKE008B	IC,POWER MANAGEMENT, KIA78R08PI CU KEC 4P
IC152	79096328	0IPMGFA046A	IC,POWER MANAGEMENT, KA278R33TSTU FAIRCHI
IC201	79098742	0ILNRHY002B	IC,LINEAR, HDC25D811B HYUNDAI 2
IC203	79097518	0IEB121616B	IC,ELITE MEMORY TECH, M12L16161A-7T-L 50PI
IC206	79094027	GITO704000F	IC,TOSHIBA, TC7W04FU
IC2A1	79098741	0ILNRHI003A	IC,LINEAR, HD153702TF HITACHI 6
IC2A2	79094009	0IJR341400C	IC,JRC, NJM3414AM-TE1,3K/REEL. JRC - - - -
IC2A4	79098738	0IKE393000G	IC,KEC, KIA393F-EL FLP-8 TP DUAL COMPARATOR =(NJM2903M)
IC2M1	79097140	0IFA303200A	IC,FAIRCHILD, KA3032 48QFP BK 5CH MOTOR DRIVER
IC301	79096024	0ICTMHY011A	IC,CUSTOMIZED, HS353106 HYNIX 100 T
IC302	79096321	0IJR223400D	IC,JRC, NJM2234L SIP8 ST S/W IC(3INPUT,1OUTPUT)
C854	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C866	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C871	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C872	79096301	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C873	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C874	79096284	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C875	79096288	0CH1333K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 2012 R/TP
C876	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C877	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C878	79096301	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C879	79096269	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C880	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C881	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C882	79097104	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
L501	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L502	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L503	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L504	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L505	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L506	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L507	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L508	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L509	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L510	79096335	0LR0682K035	INDUCTOR,RADIAL LEAD, 68UH 10% TP 6 X 6 TR5 -
L511	79096334	0LR0221J0N5	INDUCTOR,RADIAL LEAD, 2.2UH 5% TP 3X5 TR5
L512	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L601	79096336	0LR8200J025	INDUCTOR,RADIAL LEAD, 820UH 5% TP 4 X 5 TR5 -
L602	79096332	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L603	79096332	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L706	79096333	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
IC305	79094008	0IHY576532A	IC,HYUNDAI, HY57V653220CTC-7 86P
IC3F1	79097149	0IMMRFU001B	IC,MEMORIES, MBM29LV800BA-90PFTN
IC3F1A	79096479	6957R-254AB	PROGRAM, VB602M EVNT DVD PROG
IC401	79098755	0IPRPCI003B	IC,PERIPHERALS, CS4391-KZR CIRRUS LO
IC402	79098737	0IJR458000B	IC,JRC, NJM4580M 8,DMP8 TP OP AMP 2K/REEL
IC501	79094032	0INS860100A	IC,NATIONAL SEMICOND, NDV8601 240 VQFP BK
IC502	79098744	0IMMRAL012A	IC,MEMORIES, AT93C56-10SC-2.7-8S1
IC503	79096319	0IAL241600B	IC,ATMEL, AT24C16 - - - -
IC504	79096322	0IKE703100A	IC,KEC, KIA7031P 3P 3.1V RESET(TAPING) - - - -
IC505	79098739	0IKE704200B	IC,KEC, KIA7042P(AT) TO-92 4.2V RESET - - - -
IC506	79096327	0IPMGA7001A	IC,POWER MANAGEMENT, AMC1117-1.8SJ ADD MI
IC601	79096331	0IPRPNE001A	IC,PERIPHERALS, UPD16315GB-3BS NEC 4
IC602	79096330	0IPRPMT006A	IC,PERIPHERALS, MM1225XFBE MITSUMI 8
IC801	79096324	0ILNRSA013A	IC,LINEAR, LA72670M-MPB SANYO 8
J802	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
JK601	79096454	572-034K	JACK,RCA, BJP-303S-04(YL),AU-PLATED
JK602	79096453	572-034J	JACK,RCA, BJP-303S-03(WH),AU-PLATED
C883	79098702	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C884	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C885	79096283	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C886	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
C887	79096272	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC, 3.3UF SRA,SS 50V 20% FM5 TP 5
C888	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C889	79096275	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
CS501	79096468	6600M000002	SWITCH,PUSH, MPU11810MLB0 MIC DC
D101	79096002	0DD010009CA	DIODE,RECTIFIERS, EG01C TP SANKEN - - - - - -
D102	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D107	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D108	79096001	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D110	79096308	0DR302000AB	DIODE,RECTIFIERS, HER302 BK RECTRON DO201AD 100V 3A 200A 50SEC -
D111	79096009	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
D112	79096009	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
R2A9	79098774	0RH5602C622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 16 W 1608 5.00% D
R2B0	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B2	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B3	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B4	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2B5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2B6	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B7	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R2B8	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2C0	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C4	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2C5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2C6	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C7	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
JK603	79096452	572-034H	JACK,RCA, BJP-303S-02(RED),AU-PLATED
L102	79096456	616-145G	FILTER(CIRC), SHT LFSQ2215V4-04220
L122	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L123	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L124	79091007	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L201	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L206	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L207	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L208	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L2A1	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L2A2	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L301	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L302	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L303	79098758	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L305	79096333	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L3F1	79091005	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
R269	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R273	79093034	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R274	79093048	0RH6200C622	RESISTOR,METAL GLAZED(CHIP), 620 OHM 1 / 16 W 1608 5.00% D
R275	79093034	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R276	79093052	0RH9100C622	RESISTOR,METAL GLAZED(CHIP), 910 OHM 1 / 16 W 1608 5.00% D
R277	79093057	0RH1500C622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 16 W 1608 5.00% D
R278	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R279	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R281	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R290	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R291	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R292	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2A1	79093026	0RH0912C622	RESISTOR,METAL GLAZED(CHIP), 91 OHM 1 / 16 W 1608 5.00% D
R2A2	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2A6	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
Q506	79095001	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q507	79095005	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q601	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q602	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q701	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q702	79096378	0TR534409AA	TRANSISTOR,BIPOLARS, 2SC5344Y TP AUK - -
Q805	79095008	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
R100	79093009	0RD1504H632	RESISTOR,FIXED CARBON FILM, 1.5M OHM 1/2 W 5.00% MF10
R101	79093056	614-007A	RESISTOR,FIXED CEMENT, 2.7/2W CEMENT SMPS V
R104	79093055	0RS5602K619	RESISTOR,FIXED METAL OXIDE FILM, 56K OHM 2 W 5.00% TR
R105	79093001	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R106	79093001	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R107	79096376	0RS0350K619	RESISTOR,FIXED METAL OXIDE FILM, 0.35 OHM 2 W 5.00% TR
R111	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R112	79093011	0RD2200F608	RESISTOR,FIXED CARBON FILM, 220 OHM 1/6 W 5.00% TA26
R2M3	79093051	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R2M5	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M6	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2M7	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2M8	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M9	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2N0	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2N1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N2	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2N3	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2N4	79093035	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R2N5	79093032	0RH1202C622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 16 W 1608 5.00% D
R2N6	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N7	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2N8	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R220	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R230	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R231	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R232	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R233	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R234	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R235	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R236	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R237	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R239	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R240	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R241	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R242	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R243	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R252	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R113	79098761	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R114	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R115	79096375	0RN3301F408	RESISTOR,FIXED METAL FILM, 3.3K OHM 1/6 W 1.00% TA26
R116	79096374	0RN2701F408	RESISTOR,FIXED METAL FILM, 2.7K OHM 1/6 W 1.00% TA26
R117	79096339	0RD2700F608	RESISTOR,FIXED CARBON FILM, 270 OHM 1/6 W 5.00% TA26
R118	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R119	79093006	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R131	79093012	0RD2203F608	RESISTOR,FIXED CARBON FILM, 220K OHM 1/6 W 5.00% TA26
R132	79093012	0RD2203F608	RESISTOR,FIXED CARBON FILM, 220K OHM 1/6 W 5.00% TA26
R153	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R154	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R155	79096338	0RD1802F608	RESISTOR,FIXED CARBON FILM, 18K OHM 1/6 W 5.00% TA26
R156	79093005	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R157	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R158	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R507	79098768	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R508	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R509	79098768	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R510	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R511	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R512	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R514	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R515	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R516	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R517	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R518	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R519	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R520	79093023	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R521	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R522	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R616	79098762	0RD3301F608	RESISTOR,FIXED CARBON FILM, 3.3K OHM 1/6 W 5.00% TA26
R617	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R618	79096340	0RD2701F608	RESISTOR,FIXED CARBON FILM, 2.7K OHM 1/6 W 5.00% TA26
R619	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R625	79096343	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R626	79096373	0RH8202D622	RESISTOR,METAL GLAZED(CHIP), 82K OHM 1 / 10 W 2012 5.00% D
R627	79096373	0RH8202D622	RESISTOR,METAL GLAZED(CHIP), 82K OHM 1 / 10 W 2012 5.00% D
R628	79096343	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R630	79096337	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R631	79096337	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R633	79098764	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R641	79098759	0RD0752F608	RESISTOR,FIXED CARBON FILM, 75 OHM 1/6 W 5.00% TA26
R702	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R703	79096362	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R706	79096369	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R159	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R163	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R164	79093017	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R167	79096028	0RD0471F608	RESISTOR,FIXED CARBON FILM, 4.7 OHM 1/6 W 5.00% TA26
R168	79096028	0RD0471F608	RESISTOR,FIXED CARBON FILM, 4.7 OHM 1/6 W 5.00% TA26
R170	79093005	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R171	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R201	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R202	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R203	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R204	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R207	79093030	0RH1004C622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 16 W 1608 5.00% D
R217	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R218	79093044	0RH4700C622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 16 W 1608 5.00% D
R219	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2C8	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2C9	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D0	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D1	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2D2	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2D3	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D4	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2D5	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R2D6	79093026	0RH0912C622	RESISTOR,METAL GLAZED(CHIP), 91 OHM 1 / 16 W 1608 5.00% D
R2E6	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2E7	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2E8	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R2F1	79098771	0RH2200C622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 16 W 1608 5.00% D
R2F2	79098771	0RH2200C622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 16 W 1608 5.00% D
R2F3	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R320	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R321	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R322	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R323	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R324	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R325	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R326	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R327	79096370	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R328	79096350	0RH1501D622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 10 W 2012 5.00% D
R331	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R332	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R333	79096348	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R335	79096372	0RH8201D622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 10 W 2012 5.00% D
R336	79096349	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R2N9	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P0	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R2P1	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P2	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P3	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2P7	79093040	0RH2202C622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 16 W 1608 5.00% D
R2P8	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R2P9	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R2Q1	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R2R1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2R2	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R301	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R302	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R303	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R304	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R305	79096367	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R306	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R307	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R308	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R309	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R310	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R311	79096360	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R312	79096362	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R313	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R315	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R317	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R318	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R319	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R2F4	79093027	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R2F5	79098772	0RH2202C422	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 16 W 1608 1.00% D
R2F6	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2F7	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2F8	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2F9	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G1	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G2	79093039	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R2G3	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2G4	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R2G7	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R2G9	79093057	0RH1500C622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 16 W 1608 5.00% D
R2M1	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R2M2	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R368	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R369	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R3F1	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R3F2	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R3F3	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R3F4	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R3F5	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R401	79093022	0RH0182C622	RESISTOR,METAL GLAZED(CHIP), 18 OHM 1 / 16 W 1608 5.00% D
R403	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R404	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R405	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R406	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R407	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R409	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R410	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R337	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R338	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R339	79096354	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R340	79096350	0RH1501D622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 10 W 2012 5.00% D
R341	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R342	79096364	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R344	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R345	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R346	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R348	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R349	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R364	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R365	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R366	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R367	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R411	79093050	0RH6801C622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 16 W 1608 5.00% D
R412	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R413	79096480	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R414	79093047	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R415	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R416	79096480	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R417	79098770	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R418	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R419	79093041	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R420	79093041	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R428	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R429	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R430	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R431	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R432	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R539	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R540	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R541	79093029	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R542	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R543	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R544	79096346	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R545	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R546	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R547	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R548	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R550	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R553	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R554	79096347	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R555	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R556	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R433	79093046	0RH5600C622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 16 W 1608 5.00% D
R434	79093046	0RH5600C622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 16 W 1608 5.00% D
R435	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R436	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R437	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R438	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R439	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R440	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R441	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R501	79093042	0RH3301C622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 16 W 1608 5.00% D
R502	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R503	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R504	79093033	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R505	79093021	0RH0102C622	RESISTOR,METAL GLAZED(CHIP), 10 OHM 1 / 16 W 1608 5.00% D
R506	79093028	0RH1001C422	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 1.00% D
R598	79096348	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R599	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C6	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R601	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R602	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R603	79093004	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R604	79096341	0RD5602F608	RESISTOR,FIXED CARBON FILM, 56K OHM 1/6 W 5.00% TA26
R605	79093014	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R608	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R610	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R611	79096342	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R612	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R613	79093007	0RD1201F608	RESISTOR,FIXED CARBON FILM, 1.2K OHM 1/6 W 5.00% TA26
R614	79098760	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R615	79098761	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R557	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R558	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R563	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R564	79096359	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R566	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R569	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R570	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R571	79096355	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R575	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R576	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R577	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R578	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R579	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R580	79096349	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R581	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R582	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R583	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R586	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R587	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R588	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R589	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R590	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R591	79093025	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R592	79093020	0RH0000C622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 16 W 1608 5.00% D
R593	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R594	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R595	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D

PRODUCT NAME (TYPE) : <AN, 25 (*1)> DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> 2003/01 (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> 1: USD, 2: JPY, 3: STG, 4: OTHERS (<- Fill in Unit name at "C6" cell in case of "4")

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
R596	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R597	79096356	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R523	79093045	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R524	79093028	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R525	79091002	0LC0233002B	INDUCTOR,CHIP, HB-1S1608-800JT CERA
R526	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R528	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R529	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R530	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R531	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R532	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R533	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R534	79093049	0RH6800C622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 16 W 1608 5.00% D
R535	79093031	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R536	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R537	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R538	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R707	79096369	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R708	79096361	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R711	79096344	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R751	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R752	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R801	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R802	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R804	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R805	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R806	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R807	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R808	79096357	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R809	79096352	0RH1800D622	RESISTOR,METAL GLAZED(CHIP), 180 OHM 1 / 10 W 2012 5.00% D
R810	79096353	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R811	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R812	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R813	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R814	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R817	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R818	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R821	79096345	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R822	79096346	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R823	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R835	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R836	79096364	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R837	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R838	79096358	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R839	79096363	0RH3902D622	RESISTOR,METAL GLAZED(CHIP), 39K OHM 1 / 10 W 2012 5.00% D
R840	79096206	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
SW602	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW603	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW604	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW605	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G

PRODUCT NAME (TYPE) : <AN, 25 (*1)> **DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER**

CUSTOMER MODEL NAME : <AN, 25> SD-V390-S-TN

FACTORY MODEL NAME : <AN, 25> SD-V390-S-TN (if necessary)

DESTINATION : <AN, 60>

PRODUCTION START : <AN, 6> **2003/01** (yyyy/mm, Not include "/")

PRICE UNIT CODE <N, (1.0)> **1: USD, 2: JPY, 3: STG, 4: OTHERS** **(<- Fill in Unit name at "C6" cell in case of "4")**

Location No. or Reference No. AN, 8 (*1)	TOSHIBA Part No. AN, 25	Vendor's Part No. AN, 25	Description AN, 60
SW606	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW607	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW608	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW609	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW610	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW611	79097338	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
T101	79096457	6170RNGW12A	TRANSFORMER,SMPS[COI, EER3530 SOOJUNG WIDE
TU701	79096469	6700NFNG04A	TUNER, TCMN0682PA20C(US,SS)
V101	79098795	656-004C	VARISTOR, SVC681D-10A SAMHWA 4.O CUT
X201	79097347	6202R-BM04C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X301	79096459	6202R1357AC	CRYSTAL,STANDARD, X-TAL 3.579575M 15PPM SER KJE
X501	79097346	6202R-BL06C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X502	79096458	6202R1143DC	CRYSTAL,STANDARD, KJE H49U 14.31818HZ 25PPMPPM 12PFPF BK
ZD101	79096313	0DZ330009BF	DIODE,ZENER, GDZJ3.3B TP GRANDE D
ZD103	79096312	0DZ130009AA	DIODE,ZENERS, MTZ13A TP ROHM - - - - -
ZD501	79096014	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -
ZD502	79096014	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -
ZD751	79096311	0DZ102609BB	DIODE,ZENER, UZ-10BSB 26MM TP PYU
ZD752	79096317	0DZ562609AB	DIODE,ZENER, MTZ5.6C,0.5W(52MM) TP ROHM
R842	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R843	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R844	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R845	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R851	79096212	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R856	79096371	0RH7501D622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 10 W 2012 5.00% D
R857	79096368	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R858	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R866	79096366	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R867	79096351	0RH1502D622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 10 W 2012 5.00% D
R874	79096365	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
RC601	79096471	6712R0838GA	REMOTE CONTROLLER RECEIVER, TSOP1238UQ1 TEMIC 8MM 37.9KHZ
RS501	79096465	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
RS502	79096465	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
SW601	79098797	6600R-SH18A	SWITCH,TACT, CSS-4206 CHANG SHIN

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN